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# McCULLOUGH'S

Catalogue of

**Bulbs, Seeds,**  
**Plants,**  
**Shrubs, Fruit Trees, Etc.**

Autumn  
1-9-2-0



WITH COMPLETE CULTURAL DIRECTIONS FOR BULBS

TRADE MARK



McCULLOUGH'S SEEDS  
ESTABLISHED 1833

## The J. M. McCullough's Sons Co.

H. B. McCULLOUGH,  
President

SEEDSMEN

GEO. H. PARVIN,  
Vice-Pres't

316 WALNUT STREET 316  
Just Below Fourth

Long Distance  
Phone Main 4598

P. O. Box  
845

Cincinnati, O.



Established 1838  
Incorporated 1904

# INSTRUCTIONS

## Always Get Your Bulbs Early



Established 1838  
Incorporated 1904

IT IS advisable to get your bulbs in the ground as early as possible after the first of October. Sooner will do no harm in cold localities. Although they can be planted as late as they can be got in the ground, yet those planted early give finer flowers, as it is necessary for bulbs to make some root growth in Fall to give the best results. The general line of bulbs will be ready the second week in September. A few kinds (chiefly lilies) are not ready for shipment before November, as they are not matured enough to take up before that time. Therefore, please note that all general orders will be shipped as soon as received, and the "November Bulbs" will be forwarded as early in November as possible. Should you wish us to hold your general order until November bulbs are ready, please so state.

**OUR PRICES INCLUDE POSTAGE** on single bulbs and by the dozen, except where otherwise noted. Bulbs quoted by the hundred are not sent prepaid.

**Order Early.** It will greatly facilitate shipments if orders are sent early. We aim to send off all orders the day received.

**Send the Money with the Order.** Remit by Post Office Order, Registered Letter, Express Money Order, or Draft on Cincinnati or New York. United States Postage Stamps will be received for small amounts; be exceedingly careful about the least moisture getting on them when remitting, as they sometimes reach us so stuck together as to be almost worthless.

**We do not send C. O. D.** Everything being plainly priced, the return charges on money is an unnecessary expense.

**Should you change your address,** we will esteem it a favor if you will notify us, so that we can forward our Catalogues with regularity; if you receive two catalogues of the same kind, please hand one to some friend who is interested in floriculture.

**Should an Error Occur,** we desire to be promptly informed, and will take pleasure in making satisfactory corrections.

**Write your name and address distinctly and in full;** please use the order sheet and envelope inserted in this catalogue.

**Our Spring Catalogue of Seeds, Bulbs, etc. for 1920** will be ready about January 1st, and will be sent free to all customers and applicants.

## PREMIUMS AND OFFERS TO CLUBS

To induce our patrons to form clubs to purchase bulbs in quantities we offer the following liberal discounts on bulbs selected from our general lists:

On \$1.00 order may select bulbs to the amount of...	\$1.10
" 2.00 " " " " " " " " " " " "	2.25
" 3.00 " " " " " " " " " " " "	3.45
" 4.00 " " " " " " " " " " " "	4.60
" 5.00 " " " " " " " " " " " "	5.75
" 6.00 " " " " " " " " " " " "	6.90
" 7.00 " " " " " " " " " " " "	8.05
" 8.00 " " " " " " " " " " " "	9.20
" 9.00 " " " " " " " " " " " "	10.35
" 10.00 " " " " " " " " " " " "	11.50

## PARCEL POST RATES

All parcels of seeds, bulbs and plants, up to and including 8 oz. at the rate of 1c for each 2 oz. regardless of distance; over 8 oz., at the Zone Rate. All merchandise other than seeds, bulbs and plants up to and including 4 oz. in weight can be sent at the rate of 1c an ounce regardless of distance. Over 4 oz. at the Zone Rate.

**NOTE:**—When estimating postage on goods not included in our free delivery, bear in mind that while the packing on one pound may only weigh the fraction of a pound, it must be considered as a full pound when adding postage. On larger quantities add postage in proportion.

Limit of weight for delivery within local, first, second and third zones is 70 pounds; to all other zones, 50 pounds.

When larger quantities are wanted we can pack in two or more parcels if necessary, provided money is remitted to cover postage.

Zone	First Pound	Each Additional Pound
1 and 2—150 miles.....	5c	1c
3—150 to 300 miles.....	6c	2c
4—300 to 600 miles.....	7c	4c
5—600 to 1,000 miles.....	8c	6c
6—1,000 to 1,400 miles.....	9c	8c
7—1,400 to 1,800 miles.....	11c	10c
8—all over 1,800 miles.....	12c	12c

**Poisons cannot be sent by mail. Liquids and goods packed in glass should be sent by Express.**

The J. M. McCullough's Sons Co., give no warranty, express or implied, as to description, quality, productiveness, or any other matter of any seeds, bulbs or plants they send out, and they will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned.



Established 1838  
Incorporated 1904

## THE J. M. McCULLOUGH'S SONS CO.

H. B. McCULLOUGH, Pres't.

GEO. H. PARVIN, Vice-Pres't.

### Seedsman and Importers of **BULBS**

Salesrooms and Offices:

**316** WALNUT STREET **316**  
Just Below Fourth

Long Distance  
Phone Main 4598

P. O. Box  
845

**Cincinnati, Ohio**



Established 1838  
Incorporated 1904



ORDER SHEET

THE J. M. McCULLOUGH'S SONS CO., Cincinnati, O.  
316 Walnut Street, Between Third and Fourth Streets

VERY IMPORTANT—  
Write your Name and Address Distinctly and in Full.

Date 192  
(Remittance may be made by P. O. Order, Express Money Order, Postage Stamps, Drafts on New York or Cincinnati, or Cash by Express.)

Name of Person  
" Post Office  
" Rural Route Box  
" State  
" Shipping Point (If different from P. O.)  
Please forward by { State if wanted by Mail, Express, or Freight, and which Company.

Please use this Order Sheet for orders only, and carry out Catalogue Price of each article. Write your letters on a separate sheet. By observing these directions, it will help us to fill your order with greater accuracy. More order blanks will be sent on request. Always write letters on a separate sheet from your order. We give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs or plants we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned.

THE J. M. McCULLOUGH'S SONS CO.

Quantity	Name of Article Wanted	Price	Quantity	Name of Article Wanted	Price
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The above named Hyacinths, each 20c; per doz. \$2.00; per 100 \$15.00.  
Persons purchasing Hyacinths at our counters, or who wish to pay their own express charges may deduct 10c per dozen from these prices when bought by the dozen.

**FROM**

.....

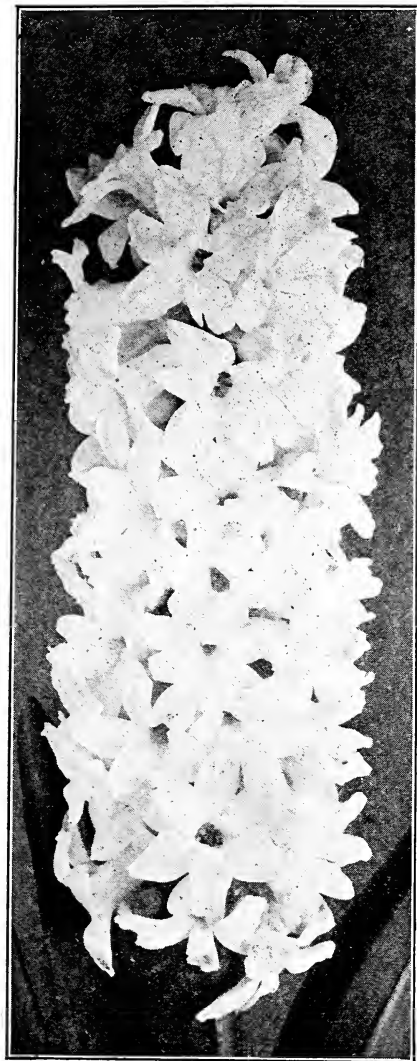
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**THE J. M. McCULLOUGH'S SONS Co.**  
**SEED MERCHANTS,**

**NO. 316 WALNUT STREET,**

**P. O. BOX 845**

**CINCINNATI, OHIO.**



# Dutch Hyacinths

THE Hyacinth is so well known and esteemed that any description of its many good qualities is needless. The list now offered includes nearly every shade of red, white, blue, yellow, etc.

## Culture of the Hyacinth

**FOR PLANTING HYACINTHS IN OPEN GROUND**, the preferable season is September to November, but they can be set out at any later time as long as the ground is open. The best compost for their culture is one-third sand, one-third well-rotted cow manure, and one-third good garden mould; or, where the soil is naturally light, well-rotted cow manure liberally intermixed is all sufficient. The beds composed of the above compost should be well-dug to a depth of fourteen inches, and raised from two to four inches above the level of the walk. The bulbs should be planted about six inches deep, and from five to six inches apart. Care must be taken not to press the earth too firmly around and over the bulbs. After planting, rake the bed or border smooth, and after the ground has frozen tolerably hard in early Winter, cover with a few inches of dry litter, leaves, evergreen boughs or coarse manure.

**FOR THE CULTURE OF HYACINTHS IN POTS**, prepare the above compost, adding, if possible, a quantity of leaf mould. The most favorable time for planting is September, October and November; for a succession of bloom, use a four or five-inch pot for a single bulb, and seven-inch for three bulbs. Set the bulbs down in the soil and cover them; do not press them in by force, for this packs the soil under them, and when the roots start they are apt to lift the bulb. After planting, water and set away in a dark place until the pots are well filled with roots. Keep the earth moist, and bring to the light as wanted to bloom. Being exposed to the light for the first time, they are, of coarse, very delicate, care should, therefore, be exercised not to place them in the direct rays of the sun for two or three days.

**FOR CULTURE IN GLASSES**, the bulbs should be so placed that only the base touches the water; then place them, for the first ten days, in a dark but cool closet or room, to promote the starting of the roots, after which expose them to the light and air as much as possible; avoid placing them near gas-light. The water should be changed as it becomes impure; draw the roots entirely out of the glasses, rinse off the fibers in clean water and wash the inside of the glass well. The water should never be allowed to freeze. When the flowers are well advanced, give them a shower of water every day.

## Choice Named Single Hyacinths

(Extra Selected, First-Size)

IT is supposed by many that the best Hyacinths are those which produce double flowers. This is by no means correct, there being many more of the single varieties producing fine, free and brilliant spikes of bloom, and they succeed better in glasses than the double.

**PRICES PER DOZEN AND SINGLE BULB INCLUDE POSTAGE**

We offer the following named varieties at the uniform price of each 20c, per dozen \$2.00, per 100 \$15.00.

### Single Red, Rose and Pink

**ETNA**, brilliant pink, large spike and flower, late flowering.  
**GARIBALDI**, brilliant carmine, very early.  
**GENERAL DE WET**, light pink, large spike, good flower.  
**GENERAL PELISSIER**, deep crimson, fine truss, early.  
**GERTRUDE**, deep rose, fine compact spike.  
**GIGANTEA**, delicate pink, large bells.  
**LADY DERBY**, bright rose, large spike and flower, excellent for forcing or pot culture, large bulb.  
**LA VICTOIRE**, brilliant dark pink, very large spike; one of the best.  
**MARCONI**, light pink, large spike and flower; extra fine.  
**MARIE CATHERINA**, deep red, large spike.  
**MORENO**, waxy pink; large truss and bells, extra fine variety.  
**QUEEN OF PINKS**, brilliant pink; large flower and spike; a great acquisition—One of the best.  
**ROBT. STEIGER**, bright crimson, a fine compact spike.  
**ROI DES BELGES**, bright scarlet, fine truss.

### Single Pure and Tinted White

**ALBERTINE**, pure white, early, good forcing variety.  
**ARENTE ARENDSSEN**, pure white, large spike and flowers, very early; splendid for forcing.  
**BLANCHEUR**, pure white, large broad truss.  
**BRITISH QUEEN**, pure white, large truss; very early.  
**CORREGIO**, the large, fleshy bells are snow white, and form a perfect truss of great beauty and size; good forcer.  
**GENERAL VETTER**, bluish white, very large spike, splendid early forcer.  
**GRANDE BLANCHE**, bluish white, large spike and flowers, early.

### Single Pure and Tinted White (Cont'd)

**GRANDEUR A MERVEILLE**, rosy-white, large truss.  
**LA GRANDESSE**, pure white, with immense bells, one of the best in cultivation.  
**L'INNOCENCE**, pure white, extra large truss.

### Single Blue, Lavender and Purple

**CAPTAIN BOYTON**, bright lavender blue, with silvery shading; handsome long spike.  
**ENCHANTRESS**, delicate porcelain blue, large compact truss.  
**GRAND LILAS**, silvery lilac, large compact truss.  
**GRAND MAITRE**, deep porcelain blue, large truss.  
**KING OF BLUES**, dark rich blue, splendid spike.  
**LA PEYROUSE**, light blue, large bells.  
**MARIE**, dark purple, very large spike.  
**PERLE BRILLIANTE**, light blue, large spike and flowers; late flowering.  
**QUEEN OF BLUES**, beautiful azure blue, large bells and handsome truss, late.  
**SCHOTEL**, light blue, long perfect truss; early, good forcer.

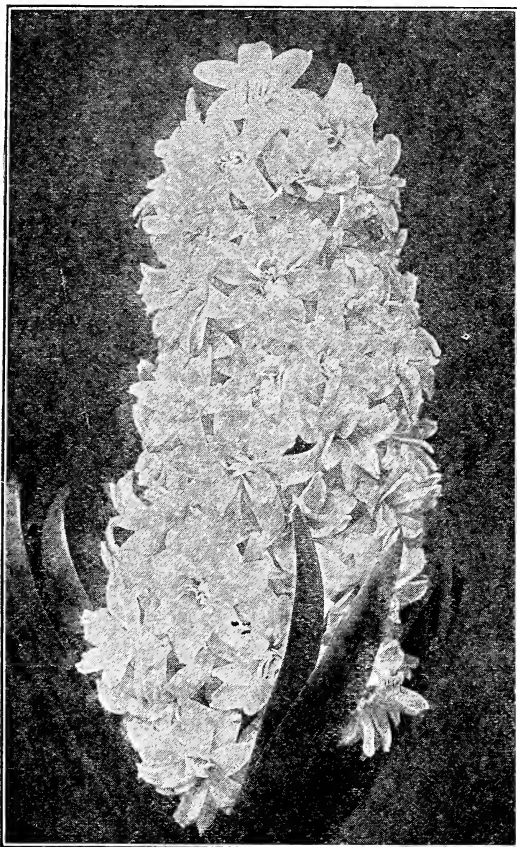
### Single Yellow

**CITY OF HAARLEM**, golden yellow, large well formed truss; extra fine.  
**KING OF YELLOWS**, pure yellow, large bell and spike.  
**YELLOW HAMMER**, golden yellow, fine large spike; one of the best.

The above named Hyacinths, each 20c; per doz. \$2.00; per 100 \$15.00.

Persons purchasing Hyacinths at our counters, or who wish to pay their own express charges may deduct 10c per dozen from these prices when bought by the dozen.

# Select First-Size Named Double Hyacinths



**W**HILE double-flowering Hyacinths do not, as a rule, produce as fine spikes as the single sorts offered on page 1, yet they are exceedingly handsome, and deserve extensive cultivation. The varieties listed below are those which we have found by actual tests to be the most satisfactory.

We offer the following named varieties at the uniform price of. . . . Each, 20c; per dozen, \$2.00; per 100, \$15.00.

## Double Red and Rose

**BOUQUET TENDRE**, dark carmine, good spike.  
**CHESTNUT FLOWER**, bright rose, large flower.  
**GROOTVOEST**, pink, large truss and bells.  
**NOBLE PAR MERITE**, rose, large bells, splendid truss.  
**PRESIDENT ROOSEVELT**, bright rose, fine spike.  
**PRINCE OF ORANGE**, blush rose, fine spike, semi-double.

## Double White

**BOUQUET ROYAL**, pure white, fine spike.  
**LA TOUR d'AUVERGNE**, pure white, very early.  
**LA VIRGINITE**, blush white, dwarf, large bells.  
**PRINCE OF WATERLOO**, pure white, large spike.  
**QUEEN OF WHITES**, pure white, large truss, fine flower.

## Double Blue

**BLOKSBERG**, porcelain striped, large truss.  
**CROWN PRINCE OF SWEDEN**, violet blue.  
**GARRICK**, lilac blue, with bright blue stripe.  
**VAN SPEYK**, porcelain blue, a grand flower.

## Double Yellow

**BOUQUET de ORANGE**, Orange.  
**GOETHE**, clear, pale yellow, large bells, fine truss.  
**JAUNE SUPREME**, deep yellow tinted with salmon.  
**SUNFLOWER**, yellow, tinted salmon.

Above named Hyacinths, Each, 20c; per dozen, \$2.00; per 100, \$15.00.

Price Per Dozen and Single Bulb Includes Postage.

# Select Second-Size Named Single Hyacinths

**T**HESE are smaller than our Extra Selected first-size bulbs offered on Page 1, but are fine flowering stock, and admirably adapted for pot culture and high-grade bedding where distinct shades of color are desired.

We can furnish them in the following selected varieties at the uniform price of each 15c; per doz., \$1.50; per 100 \$10.00.

## Single Red, Rose and Pink

**CARDINAL WISEMAN**, charming bright rose pink, large spike.  
**GENERAL PELISSIER**, deep crimson, fine truss, early.  
**GERTRUDE**, deep rose, fine compact spike.  
**GIGANTEA**, delicate pink, large bells.  
**MORENO**, waxy pink; large truss and bells, extra fine variety.  
**QUEEN OF PINKS**, brilliant pink, large flower and spike.  
**ROBT. STEIGER**, bright crimson, a fine compact spike.  
**ROI DES BELGES**, bright scarlet, fine truss.

## Single Pure and Tinted White

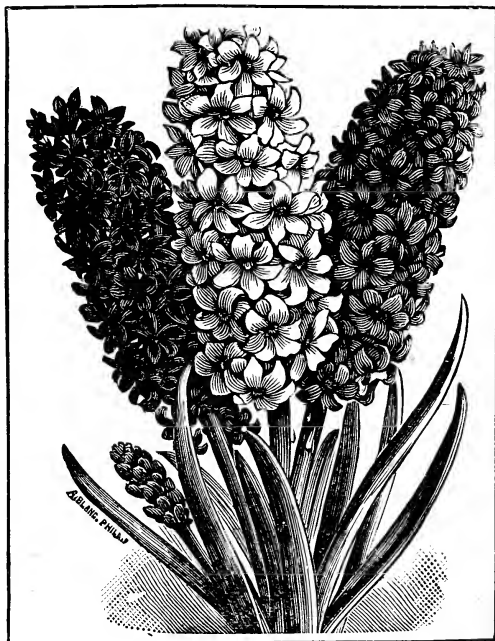
**ARENTINE ARENDSSEN**, pure white, large spike, good forcer.  
**BLANCHEUR**, pure white, large broad truss.  
**CORREGIO**, pure white, large truss, good forcer.  
**GRANDE BLANCHE**, blush white, large spike and flowers, early.  
**GRANDEUR A MERVEILLE**, rosy-white, large truss.  
**LA GRANDESSE**, pure white, with immense bells: one of the best in cultivation.  
**L'INNOCENCE**, pure white, extra large truss.

## Single Blue, Lavender and Purple

**ENCHANTRESS**, porcelain blue, large compact truss.  
**GRAND MAITRE**, deep porcelain blue, large truss.  
**KING OF BLUES**, dark, rich blue, splendid spike.  
**LA PEYROUSE**, light blue, large bells.  
**MARIE**, dark purple, very large spike.  
**QUEEN OF BLUES**, beautiful azure blue, large bells and handsome truss: late.  
**REGULUS**, light blue, good forcer and bedder.

## Single Yellow

**CITY OF HAARLEM**, golden yellow, large truss; extra.  
**KING OF YELLOWS**, pure yellow, large bell and spike.  
**YELLOW HAMMER**, golden yellow, large spike.  
 The above named Hyacinths, each 15c; per doz., \$1.50; per 100, \$10.00.



Persons purchasing Hyacinths at our counters, or who wish to pay their own express charges may deduct 10c per dozen from these prices when bought by the dozen.

# CHOICE UN-NAMED HYACINTHS

For Bedding and Forcing, in Separate Colors and Mixed Shades

These are made up of varieties selected for beds and borders, or for forcing for cut flowers, and are of such superior quality as to be entirely satisfactory to florists who use large quantities of them.

Prices per Dozen and Single Bulb Include Postage.

We offer the following un-named varieties at the uniform price of . . . . . each, **10c**; per doz., **\$1.00**; per 100, **\$6.00**.

## Single Varieties

Single Red, mixed shades.  
" Rose.  
" Pure White.  
" White, tinted.  
" Dark Blue and Purple.  
" Light Blue.  
" Yellow.  
**SINGLE MIXED**, all colors.

## Double Varieties

Double Red, mixed shades.  
" Rose.  
" Pure White.  
" White, tinted.  
" Dark Blue and Purple.  
" Light Blue.  
" Yellow.  
**DOUBLE MIXED**, all colors.

## HYACINTHS--Miniature or Dutch Roman

These may be planted close together in pots or boxes, also in beds in the open ground with charming effect. We can furnish named varieties in the following colors: **Dark Red, Rose and Pink, Dark Blue, Light Blue, Pure White, and All Colors Mixed**. . . . . Each, **6c**; per doz., **65c** per 100, **\$4.25**.

## Round Bed of Named Single Hyacinths, Second-Size



**THIS** illustration represents a bed 15 feet in circumference, or five feet across, composed of 5 circular rows, requiring a total of 100 bulbs, planted 6 inches apart, as follows:

**Combination No. 1.** (100 Hyacinths—select Second Size Named). Center row contains 9 red Hyacinths; second row contains 14 White Hyacinths; third row contains 20 Blue Hyacinths; fourth row contains 25 Pink Hyacinths; fifth row contains 32 Dark Blue Hyacinths.

Price **\$10.00**, not prepaid.

**Combination No. 2.** Consists of 100 Un-named Hyacinths, mixed shades that will produce a charming effect.

Price **\$6.00** not prepaid.

## SQUARE BED OF Single Hyacinths

This illustration represents a bed 6 feet square, requiring a total of 169 bulbs planted 6 inches apart.

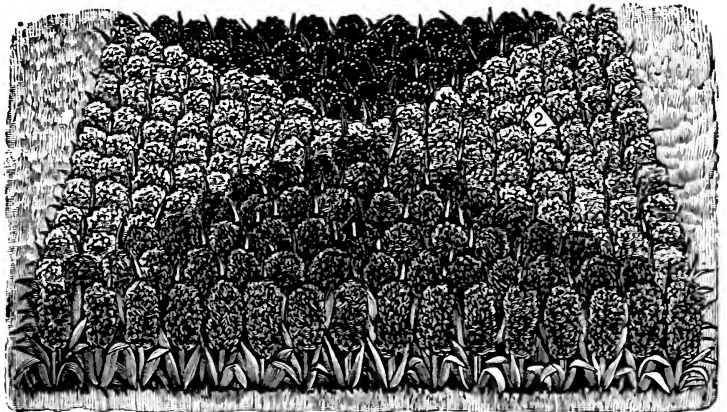
**PINK AND BLUE COMBINATION** requires 85 Pink and 84 Blue Hyacinths.

**CRIMSON AND WHITE COMBINATION** requires 85 Crimson and 84 White Hyacinths.

Price for either Combination—Our Select Second Size. Named Hyacinths, **\$15.50** not prepaid.

### "Suburban Combination"

consists of 169 Choice Un-named Hyacinths, mixed shades. Price **\$9.00**, not prepaid.



## McCULLOUGH'S COLLECTIONS OF NAMED HYACINTHS

Special Selection for Growing in Water.

This selection is made up of sorts which are especially adapted for the purpose. For cultural notes see page 1. 12 distinct named single varieties; our selection. . . . . **\$2.00**

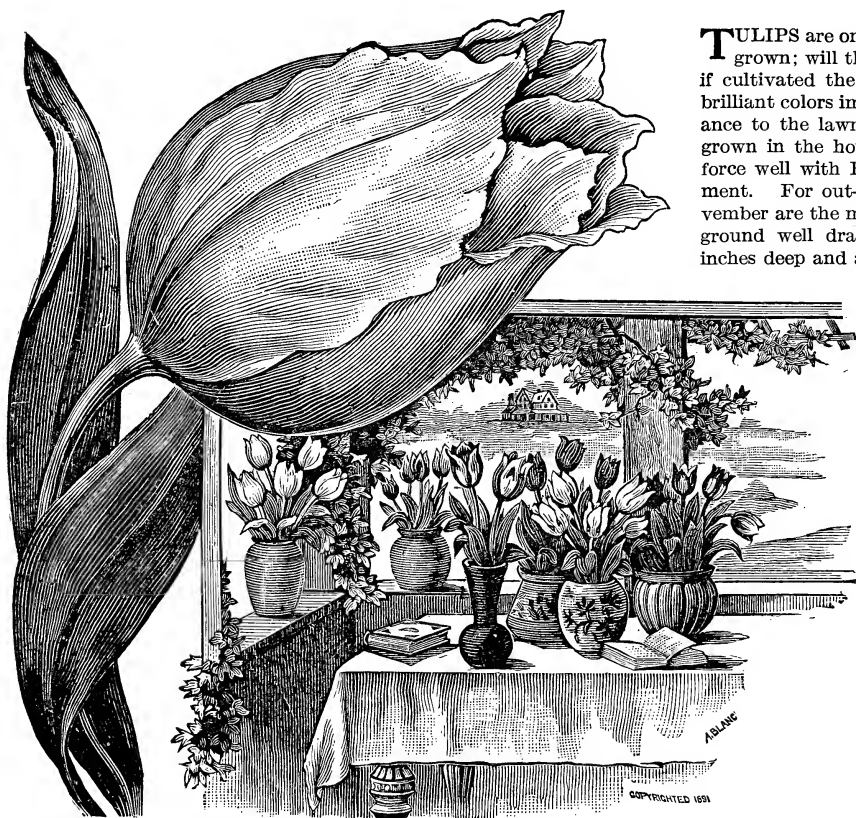
Persons purchasing Hyacinths at our counters, or who wish to pay their own express charges may deduct 10c per dozen from these prices when bought by the dozen.

Special Selection for Growing in Pots.

A selection of distinct sorts best adapted for the purpose. For cultural notes see page 1.

12 distinct named double varieties, our selection. . . . . **\$2.00**

# Tulips



**T**ULIPS are one of the most ornamental flowers grown; will thrive in any rich soil or situation if cultivated the same as the Hyacinth. Their brilliant colors impart a rich and beautiful appearance to the lawn in early Spring. They can be grown in the house in pots or baskets, and will force well with Hyacinths under the same treatment. For out-door planting, October and November are the most favorable months. Have the ground well drained; plant from three to four inches deep and about six inches apart.

The letters, a, b, c, following the varieties, indicate their earliness of bloom, the A's flower together, and are the earliest; B next, etc. The figures indicate the height attained in inches, to aid in arranging flower beds.

## Prices per Dozen and Single Bulb Include Postage

Persons purchasing Tulips at our counters, or who wish to pay their own express charges, may deduct 5c per doz. when bought by the dozen. Prices per 100 are not prepaid.

## SINGLE EARLY TULIPS

	Each	Per Doz.	Per 100
<b>ARTUS</b> , b7, scarlet, fine bold flowers, good for forcing or bedding. ....	\$0.06	\$0.60	\$4.00
<b>BELLE ALLIANCE</b> , b7, brilliant scarlet, large flower, sweet scented; fine for bedding and forcing. ...	.06	.65	4.50
<b>CHRYSOLOGA</b> , b9, pure yellow, large and handsome flower; finest yellow bedder. ....	.06	.65	4.50
<b>COTTAGE MAID</b> , b6, rosy pink, edged with white; a charming variety for bedding and late forcing	.06	.65	4.50
<b>CRIMSON BRILLIANT</b> , b9, brilliant scarlet, large flower; splendid variety for bedding and forcing	.06	.65	4.50
<b>DUC DE BERLIN</b> , a8, scarlet with broad yellow edge and yellow base; good for forcing. ....	.06	.65	4.50
<b>DUCHESSE DE PARMA</b> , b9, brownish red with yellow border, large flower; good forcer and bedder	.06	.60	4.00
<b>DUSART</b> , b8, dark scarlet, large and very robust, fine for parks, a grand flower; finest scarlet bedder	.06	.60	4.00
<b>GRAND DUC</b> , (Keiserskroon), b9, deep crimson with broad orange yellow margin, large and effective	.06	.60	4.00
<b>JOOST VAN VONDEL</b> , b8, crimson, flamed white, large and distinct. ....	.06	.65	4.50
<b>KING OF YELLOWS</b> , b9, deep golden yellow; extra large and showy; good for early forcing. ....	.06	.60	4.00
<b>LA REINE</b> . (Queen Victoria). b6, white, slightly shaded rose; good variety for bedding or forcing..	.06	.65	4.50
<b>L'IMMACULEE</b> , b7, pure white, very early and fine; excellent for forcing and bedding. ....	.06	.65	4.50
<b>POTTEBAKER SCARLET</b> , a8, bright scarlet, very large and fine flower. ....	.06	.65	4.50
“ <b>WHITE</b> , a8, pure white, fine large showy flower. ....	.07	.70	5.00
“ <b>YELLOW</b> , a8, large fine bright golden yellow; excellent forcer. ....	.07	.70	5.00
<b>PRINCESS MARIANNE</b> , b8, white, with rosy stripe, large flower; excellent for bedding. ....	.06	.65	4.50
<b>PRINCE OF AUSTRIA</b> , b9, orange scarlet, sweet scented; fine forcer or bedder, a grand Tulip. ...	.06	.65	4.50
<b>PROSERPINE</b> , a8, carmine rose, rich, silky and effective, beautifully shaped large flower. ....	.10	1.00	7.00
<b>ROSA MUNDI</b> , b8, white, shaded with rich rose, very strong stem; early. ....	.06	.65	4.50
<b>ROSE GRISDELIN</b> , b6, delicate rose, shaded white; fine for forcing and bedding; very beautiful. ..	.06	.60	4.00
<b>THOMAS MOORE</b> , b10, orange scarlet, effective large tulip; sweet scented. ....	.06	.60	4.00
<b>VERMILION BRILLIANT</b> , b8, deep dazzling vermilion; extra fine for pots and massing. ....	.07	.70	5.00
<b>WHITE SWAN</b> , b9, large pure white, egg shaped flower on tall stems. ....	.06	.60	4.00
<b>YELLOW PRINCE</b> , b7, golden yellow, extra large and showy, scented as a Tea Rose. ....	.06	.60	4.00
<b>CHOICEST MIXED</b> , from above named varieties; extra fine. ....	.06	.50	3.50
<b>FINE MIXED</b> , including all colors and shades. ....	.05	.45	3.00



## Late May Flowering Single Tulips

**THIS** beautiful class is becoming more popular as they become better known. They are distinct from the early flowering sorts, coming into bloom two or three weeks later, and extending the Tulip season over a period of four weeks or more.

On account of their extreme hardiness, they are especially adapted for the permanent hardy flower border, where they should be liberally planted in clumps or masses. They may also be naturalized in grass, wild gardens, etc. For bedding they are superb, while as cut flowers they are much to be preferred to the early type, having long stems with flowers of great substance that can stand out in a perfect condition for a long time.

In planting, the bulbs should be set a little deeper than ordinary tulips, a covering of 4 inches being about right.

**BOUTON D'OR**, (Ida, Golden Beauty), (21 inches). Rich, deep golden yellow; a large, long stemmed, globular flower of finest substance; fine bedder and unequaled for cutting. Each, **5c**; per dozen, **50c**; per 100, **\$3.50**.

**GESNERIANA SPATHULATA**, (28 inches). Intense crimson scarlet, with glittering blue-black center. The tallest, largest flowered and showiest of all Tulips for bedding out in masses. Flowers of enormous size. Each, **5c**; per dozen, **50c**; per 100, **\$3.50**.

**GESNERIANA ROSEA**, (24 inches). Very large flowers of a bright rose color, with blue center, remaining in perfection for a long time. Each, **5c**; per dozen, **50c**; per 100, **\$3.50**.

**GOLDEN CROWN**, (22 inches). Large flowers with pointed petals, color rich yellow, petals faintly edged with red; a good bedder, sweet scented. Each, **5c**; per dozen, **50c**; per 100, **\$3.50**.

**ISABELLA** (Blushing Bride, Shandon Bells), (18 inches). Large, long, handsome flower silvery white, suffused soft carmine rose towards the edge; center creamy yellow and green. Each, **\$0.05**; per dozen, **\$0.50**; per 100, **\$3.50**.

**LA CANDEUR** (Parisian White), (15 inches). Pure white changing to silvery pink; large egg shaped flowers. Each, **.05**; per dozen, **.50**; per 100, **3.50**.

**LA MERVEILLE** (18 inches). A magnificent variety with very large, sweet scented flowers; color, salmon rose overlaid with orange-red, very effective in beds and borders. Each, **.05**; per dozen, **.50**; per 100, **3.50**.

**PARISIAN YELLOW** (23 inches). A beautiful, large, pure yellow of exquisite shade and shape; special value for cutting. Each, **.05**; per dozen, **.50**; per 100, **3.50**.

**PICOTEE** (Maiden's Blush), (24 inches). White, faintly edged with pink, which suffuses the entire flower as it ages; a beautiful cut flower. Each, **.05**; per dozen, **.50**; per 100, **3.50**.

**SALMON QUEEN** (Englescomb Pink), (18 inches). Bright rose pink with a salmon sheen, large globular flower. Each, **.05**; per dozen, **.50**; per 100, **3.50**.

**SWEET NANCY**. A very large, egg-shaped flower, white edged and suffused with rose. Each, **.05**; per dozen, **.50**; per 100, **3.50**.

**CHOICEST MIXED**. A splendid mixture of all colors, including sweet scented varieties. Each, **.05**; per dozen, **.45**; per 100, **3.00**.



May Flowering Tulips

	Each	Per Doz.	Per 100
<b>ISABELLA</b> (Blushing Bride, Shandon Bells), (18 inches). Large, long, handsome flower silvery white, suffused soft carmine rose towards the edge; center creamy yellow and green. . . . .	<b>\$0.05</b>	<b>\$0.50</b>	<b>\$3.50</b>
<b>LA CANDEUR</b> (Parisian White), (15 inches). Pure white changing to silvery pink; large egg shaped flowers. . . . .	<b>.05</b>	<b>.50</b>	<b>3.50</b>
<b>LA MERVEILLE</b> (18 inches). A magnificent variety with very large, sweet scented flowers; color, salmon rose overlaid with orange-red, very effective in beds and borders. . . . .	<b>.05</b>	<b>.50</b>	<b>3.50</b>
<b>PARISIAN YELLOW</b> (23 inches). A beautiful, large, pure yellow of exquisite shade and shape; special value for cutting. . . . .	<b>.05</b>	<b>.50</b>	<b>3.50</b>
<b>PICOTEE</b> (Maiden's Blush), (24 inches). White, faintly edged with pink, which suffuses the entire flower as it ages; a beautiful cut flower. . . . .	<b>.05</b>	<b>.50</b>	<b>3.50</b>
<b>SALMON QUEEN</b> (Englescomb Pink), (18 inches). Bright rose pink with a salmon sheen, large globular flower. . . . .	<b>.05</b>	<b>.50</b>	<b>3.50</b>
<b>SWEET NANCY</b> . A very large, egg-shaped flower, white edged and suffused with rose. . . . .	<b>.05</b>	<b>.50</b>	<b>3.50</b>
<b>CHOICEST MIXED</b> . A splendid mixture of all colors, including sweet scented varieties. . . . .	<b>.05</b>	<b>.45</b>	<b>3.00</b>

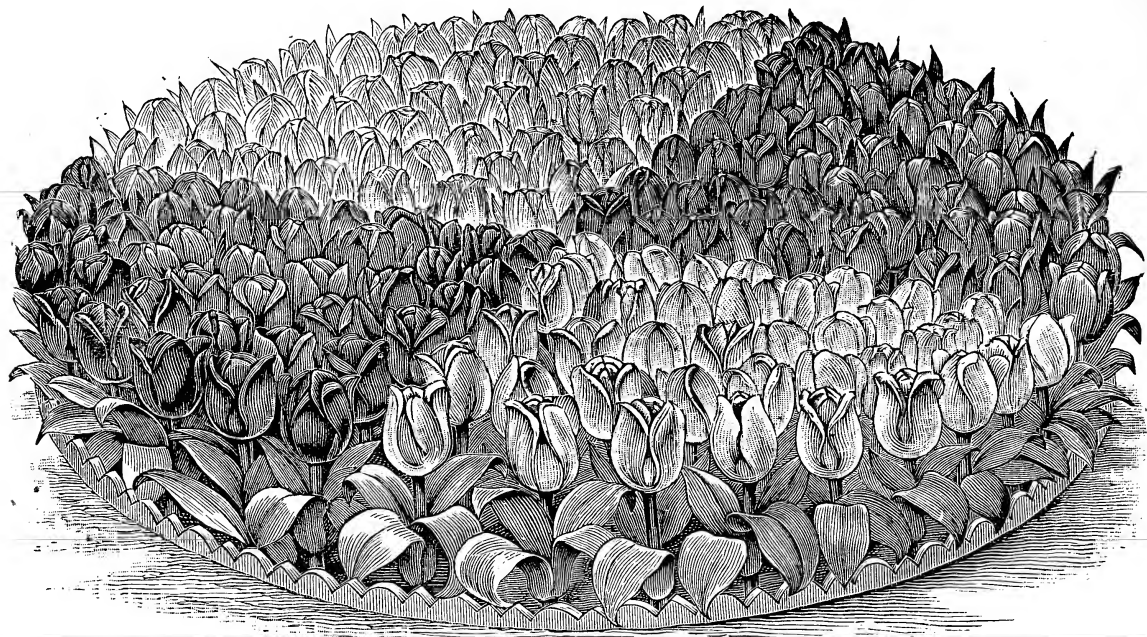
## DARWIN TULIPS (May-Flowering)



Darwin Tulips

**THE** Darwin are late May-flowering garden Tulips, producing very large bowl-formed flowers of symmetrical shape, on tall, strong stems, 2 to 3 feet high, and are effective grown in groups, in the shrubbery or herbaceous border. They far surpass in color and brilliancy anything before known in Tulips. They include almost every conceivable color and shade. Each Per Doz. Per 100

<b>ASA GRAY</b> Dark carmine, large, finely formed flower. . . . .	<b>\$0.06</b>	<b>\$0.60</b>	<b>\$4.00</b>
<b>BARONNE DE LA TONNAGE</b> (26 inches). Bright, pink margined blush—base white, tinged blue. A long and beautiful flower. . . . .	<b>.06</b>	<b>.60</b>	<b>4.00</b>
<b>CLARA BUTT</b> . A large flower of remarkable beauty; color soft salmon pink, shaded rose. . . . .	<b>.06</b>	<b>.60</b>	<b>4.00</b>
<b>DREAM</b> . Beautiful delicate lilac—large globular flowers. . . . .	<b>.06</b>	<b>.65</b>	<b>4.50</b>
<b>FARNCOMBE SANDERS</b> . Immense flower of the most brilliant scarlet, one of the best and showiest. . . . .	<b>.07</b>	<b>.70</b>	<b>5.00</b>
<b>GLOW</b> . Brilliant, glowing vermillion; blue-black base, zoned white. . . . .	<b>.06</b>	<b>.65</b>	<b>4.50</b>
<b>GRETCHEN</b> . (Margaret). A lovely large flower of globular form; outside soft blush; inside blush rose. . . . .	<b>.06</b>	<b>.65</b>	<b>4.50</b>
<b>MADAME KRELAGE</b> . Soft lilac rose, with a broad margin of blush pink; large flower on a very tall stem; good for forcing. . . . .	<b>.07</b>	<b>.70</b>	<b>5.00</b>
<b>PAINTED LADY</b> . Milk white, flushed heliotrope—a good bedding and forcing variety. . . . .	<b>.06</b>	<b>.65</b>	<b>4.50</b>
<b>PRIDE OF HAARLEM</b> . Magnificently formed—flower of immense size; color brilliant, deep salmon-rose, shaded with scarlet; electric blue base. . . . .	<b>.06</b>	<b>.65</b>	<b>4.50</b>
<b>THE SULTAN</b> . Rich, glossy black maroon; one of the best dark varieties. . . . .	<b>.06</b>	<b>.60</b>	<b>4.00</b>
<b>WHITE QUEEN</b> . A large globular flower of pure white, faintly flushed with delicate blush. . . . .	<b>.06</b>	<b>.65</b>	<b>4.50</b>
<b>FINEST MIXED</b> . Great variety of all colors and shades. . . . .	<b>.05</b>	<b>.50</b>	<b>3.50</b>



### Bed of Single or Early Tulips

This illustration represents a bed eighteen feet in circumference or six feet across, requiring a total of 200 bulbs planted five inches apart.

**Yellow and Scarlet Combination**—100 Yellow and 100 Scarlet Tulips.

**White, Crimson, Yellow and Pink Combination**—50 White, 50 Crimson, 50 Yellow and 50 Rose Tinted Tulips. Price for either Combination. **\$7.00 each**; not prepaid.

The above combinations are prepared from Named Varieties that will bloom together.

**McCULLOUGH'S "PREMIER"** combination of **SINGLE TULIPS** consists of 200 superfine mixed Single Tulips, embracing a wide range of beautiful colors. Price **\$5.00**; not prepaid.

## DOUBLE TULIPS

**THIS** class of Tulips is one of the most valuable. The earlier varieties are admirably adapted for pot cultures and form a pleasing contrast to the Single Tulips in the greenhouse or conservatory. When planted in the open border they are very showy, and a succession of bloom may be had by a judicious selection from the earlier and later varieties. The *Pex Rubrorum* and *La Candeur* form a dense mass of bloom when grown in beds, and the flowers remain in perfection of bloom longer than those of the single varieties.

**FOR CULTURAL DIRECTIONS, ETC., SEE TULIPS, PAGE 4.**



Double Tulips

- BOULE DE NEIGE**, pure white, large flower; extra fine.  
Each, **6c**; per dozen, **65c**; per 100, **\$4.50**.
- COURONNE D'OR**, b8, golden yellow flushed orange, large handsome flower; excellent for growing in pots or beds.  
Each, **6c**; per dozen, **65c**; per 100, **\$4.50**.
- GLORIA SOLIS**, a7, deep crimson, with broad golden margin, very large. . . . Each, **6c**; per dozen, **65c**; per 100, **\$4.50**.
- IMPERATOR RUBRORUM**, a9, rich crimson scarlet, extra fine for forcing. . . Each, **7c**; per dozen, **70c**; per 100, **\$5.00**.
- LA CANDEUR**, b8, pure white, extensively grown for bedding.  
Each, **6c**; per dozen, **65c**; per 100, **\$4.50**.
- MURILLO**, b8, blush white, shaded rose, large flowers, fine for forcing and bedding.  
Each, **6c**; per dozen, **60c**; per 100, **\$4.00**.
- RUBRA MAXIMA**, a9, dark, crimson scarlet, splendid early forcer and good bedder.  
Each, **6c**; per dozen, **65c**; per 100, **\$4.50**.
- SALVATOR ROSA**, a8, deep rose flamed with blush; a fine large double flower, suitable for early forcing or bedding.  
Each, **8c**; per dozen, **75c**; per 100, **\$5.50**.
- TEA ROSE**, saffron yellow, changing to rosy apricot; good forcer for growing in pots and pans.  
Each, **7c**; per dozen, **70c**; per 100, **\$5.00**.
- TOURNESOL**, a7, scarlet, margined yellow; one of the best for forcing. . . . Each, **7c**; per dozen, **70c**; per 100, **\$5.00**.
- CHOICEST MIXED**, from named varieties, extra fine.  
Each, **6c**; per dozen, **60c**; per 100, **\$4.00**.
- FINE MIXED**, including all colors and shades.  
Each, **5c**; per dozen, **50c**; per 100, **\$3.50**.

Persons purchasing Tulips at our counters, or who wish to pay their own express charges, may deduct 5c per dozen when bought by the dozen. Prices per 100 are not prepaid.



## Home Collections of Double Tulips

Our "Home Collection No. 1" consists of fifty Double Flowering Tulips carefully selected from named varieties, and will produce handsome large double flowers. Price, \$2.00; not prepaid.

"Home Collection No. 2" consists of twenty-five double and twenty-five single flowering Tulips selected from named varieties. Price, \$1.85; not prepaid.

**McCULLOUGH'S "NORWOOD" collection of DOUBLE TULIPS** consists of 200 superfine, mixed Double Tulips. Price, \$7.00; not prepaid.

## Parrot or Dragon Tulips

**VERY** large flowers of singular and picturesque forms and brilliant colors; very beautiful and interesting. The petals are curiously fringed or cut. They form showy flower beds or borders, are of endless variety of form and color, stand a long time when cut, and should be grown in every flower garden in quantity.

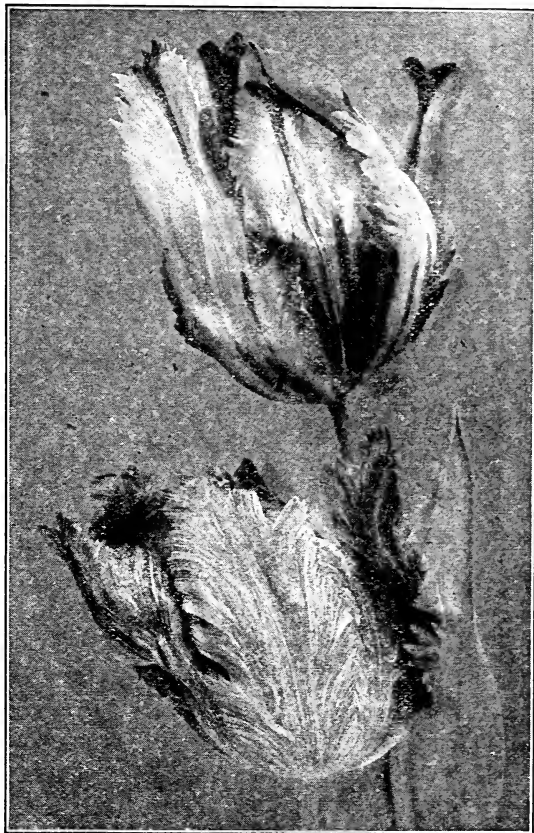
**CONSTANTINOPLE**, large red flowers, tipped orange.  
Each, 5c; per dozen, 50c; per 100, \$3.50.

**CRAMOISIE BRILLIANT**, deep crimson, with large black star-shaped center, extra fine.  
Each, 5c; per dozen, 50c; per 100, \$3.50.

**LUTEA MAJOR**, large bright yellow, feathered with red and green. . . . . Each, 5c; per dozen, 50c; per 100, \$3.50.

**PERFECTA**, striped yellow and scarlet.  
Each, 5c; per dozen, 50c; per 100, \$3.50.

**FINEST MIXED COLORS.**  
Each, 5c; per dozen, 45c; per 100, \$3.00.



Parrot or Dragon Tulips

## Crocus

**THIS** brilliant and universally admired Spring flower will thrive in any soil or situation, but to be brought to the highest perfection it should be grown in an open bed or border of deep, rich, sandy loam. When planted in large groups or lines of distinct colors, the effect is very striking, and the bulbs are now offered so cheap as to justify their liberal use. They are invaluable for pot culture. To secure a succession of blooms commence planting early in October; 6 or 8 bulbs in a pot (the named varieties are best for this purpose), using rich soil and planting about an inch deep. Place the pots on a surface of ashes, cover the top one inch deep with soil until the leaves appear, when they may be removed to the house.

### LARGE FLOWERING NAMED CROCUS

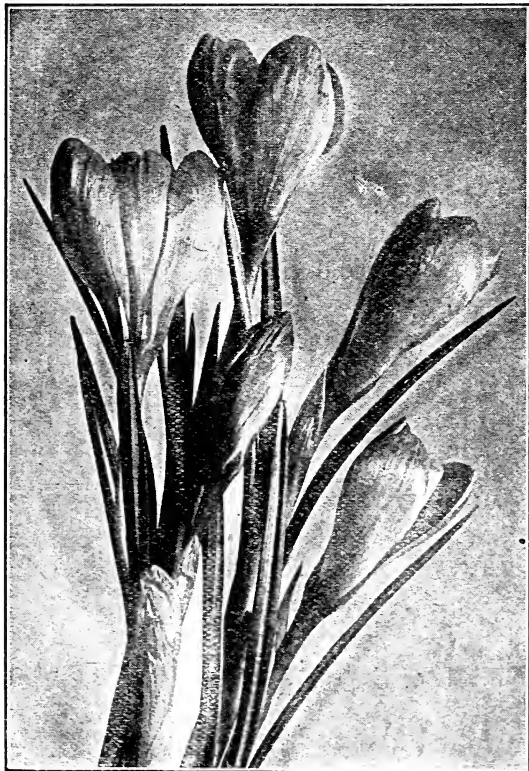
**THESE** are large bulbs of the best varieties, remarkable for richness of color and size of their flowers, and are the best to use for pot culture or where extra fine results are wanted.

	Per Doz.	Per 100
<b>ALBION</b> , lavender striped white and violet. . . . .	\$0.35	\$2.25
<b>BARON BRUNOW</b> , purplish mauve, shading to deep purple at tips. . . . .	.35	2.25
<b>KING OF BLUES</b> , light blue, large flower. . . . .	.35	2.25
<b>KING OF WHITES</b> , pure white; extra large flower. . . . .	.35	2.25
<b>LA MAJESTEUSE</b> , violet striped white, large flower. . . . .	.35	2.25
<b>MAMMOTH WHITE</b> , pure white, extra large flower. . . . .	.35	2.25
<b>MAMMOTH YELLOW</b> , large golden yellow. . . . .	.35	2.25
<b>MONT BLANC</b> , large, pure white, extra. . . . .	.35	2.25
<b>NON PLUS ULTRA</b> , light blue, with white border. . . . .	.35	2.25
<b>PRINCE ALBERT</b> , dark blue, extra fine. . . . .	.35	2.25
<b>SIR WALTER SCOTT</b> , white, striped with violet. . . . .	.35	2.25

### MIXED CROCUS.

The bulbs offered under this head are smaller than our Large Flowering Named Sorts, but are quite satisfactory for planting in the grass or for any position out of doors.

	Per doz.	per 100
<b>Large White</b> . . . . .	\$0.25	\$1.75
<b>Large Yellow</b> . . . . .	.25	1.75
<b>Extra Large Yellow</b> . . . . .	.30	2.00
<b>Large Blue and Purple</b> . . . . .	.25	1.75
<b>Striped and Variegated</b> . . . . .	.25	1.75
<b>Mixed All colors</b> . . . . .	.25	1.75



Crocus

Prices on Crocus include postage. Customers may deduct 3c per doz., 10c per 100 if sent by express at their expense.

# Narcissus or Daffodils



Group of Narcissus or Daffodils

A BEAUTIFUL class of early blooming flowers, both for out-door blooming and for use as cut flowers in the house. Their delicious fragrance, easy culture and thriftiness, entitle them to the greatest popularity.

The double and single sorts are perfectly hardy and need not be disturbed oftener than once in three or four years, and not then unless they have become too much crowded by offsets. Plant in the Fall in good garden soil, about three or four inches deep and two to six inches apart.

The Polyanthus varieties for flowering in pots in the house are very satisfactory. They bloom about the first of February in dense clusters, two or three flower stalks to each bulb, while the earliest of all, the Paper White, will come into bloom as early as December.

A cool, natural temperature suits them best. Pot in the Fall, let them root for two or three months in the dark, then remove to the conservatory or sitting room, and water as often as the soil requires moisture.

## Single Narcissus

**BARRI CONSPICUA.** Large, broad yellow perianth; broad, short crown edged with scarlet; a robust, strong grower and free bloomer; should be grown in quantity for cutting, as it lasts longer than most sorts. . . . . Each, 6c; per doz., 55c; per 100, \$3.75.

**BICOLOR EMPRESS.** Perianth white, trumpet rich yellow, serrated at edges; a magnificent large variety, bold and erect and of rare beauty for cutting. Each, 6c; per dozen, 60c; per 100, \$4.00.

**BICOLOR GRANDIS.** Flowers large with broad white perianth, the petals of which are wide and overlapping; trumpet yellow, beautifully imbricated, a flower of great substance and fine for cutting; late flowering and valuable for succession. . . . . Each, 6c; per dozen, 60c; per 100, \$4.00.

**BICOLOR VICTORIA.** Perianth creamy white, trumpet rich yellow, delicately perfumed; a strong grower with massive flowers which stand boldly erect. Each, 6c; per dozen, 60c; per 100, \$4.00.

**EMPEROR.** Perianth deep crimson, trumpet large, rich golden yellow; one of the finest Daffodils in cultivation, which should be in every collection; a magnificent flower, much prized for cutting. Each, 6c; per dozen, 60c; per 100, \$4.00.

**FIGARO.** Perianth lemon yellow, cup yellow shaded with orange, a large and well-formed flower. Each, 5c; per dozen, 45c; per 100, \$3.25.

**GOLDEN SPUR.** Perianth deep yellow, trumpet golden yellow; a charming, highly perfumed flower, flowering early and freely. . . . . Each, 6c; per dozen, 60c; per 100, \$4.00.

**MRS. LANGTRY.** Pure white perianth, broad and overlapping; cup pale primrose changing to white with age; free flowering variety. . . Each, 5c; per doz., 45c; per 100, \$3.25.

**POETICUS.** (Pheasants' Eye or Poet's). Flowers pure white with distinct red crown, sweet scented. Each 5c; per dozen, 40c; per 100, \$3.00.

**POETICUS KING EDWARD VII.** A magnificent, large flowering early variety with a broad, round white flower with yellow cup edged deep red. Each, 8c; per dozen, 80c; per 100, \$6.00.

**POETICUS ORNATUS.** Large, pure white flowers, saffron cup, tinted with rosy scarlet; very early. Each, 5c; per dozen, 40c; per 100, \$3.00.

**PRINCEPS.** Large flowers with light yellow perianth and deep yellow trumpet. . . Each, 6c; per dozen, 60c; per 100, \$4.00.

**SIR WATKINS.** Perianth sulphur yellow, cup slightly deeper in color and tinged with orange, flowers very large and free flowering. . . . . Each 8c; per dozen, 75c; per 100, \$5.50.

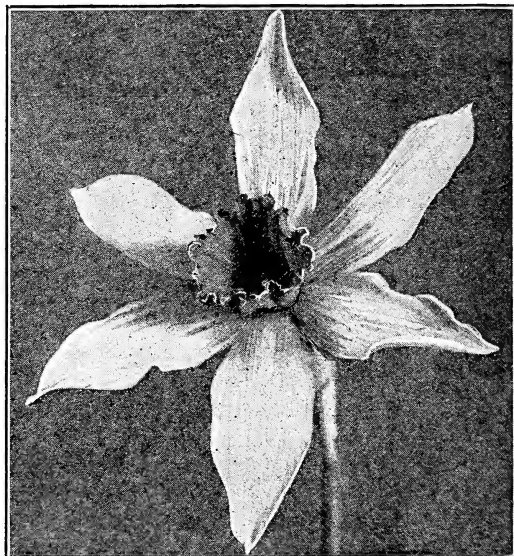
**STELLA.** Perianth white and slightly twisted, yellow crown; flowers large, free blooming and one of the best for naturalizing. . . . . Each, 5c; per dozen, 45c; per 100, \$3.25.

**TRUMPET MAJOR.** Flowers large and of uniform deep golden yellow; comes into bloom early and is excellent for forcing, bedding or naturalizing. Each, 6c; per dozen, 60c; per 100, \$4.00.

**VON SION SINGLE.** Large flowers of rich yellow color; an excellent sort for forcing, bedding or naturalizing. Each, 6c; per dozen, 60c; per 100, \$4.00.

Price per dozen and single bulb includes postage.

Persons purchasing Narcissus at our counters or who wish to pay their own express charges may deduct 5c per dozen from these prices when bought by the dozen. Prices per 100 not prepaid.



Narcissus Barri Conspicua

## Double Narcissus

**ALBA PLENA ODORATA.** The double Poeticus; flowers pure white, large and very fragrant, one of the finest for all purposes. . . . . Each, **5c**; per dozen, **45c**; per 100, **\$3.25**.

**INCOMPARABLE.** Pale yellow and orange mixed, full double flower, large, varying somewhat in shade like the single variety, from pale citron yellow to deep orange.

Each, **5c**; per doz., **45c**; per 100, **\$3.25**.

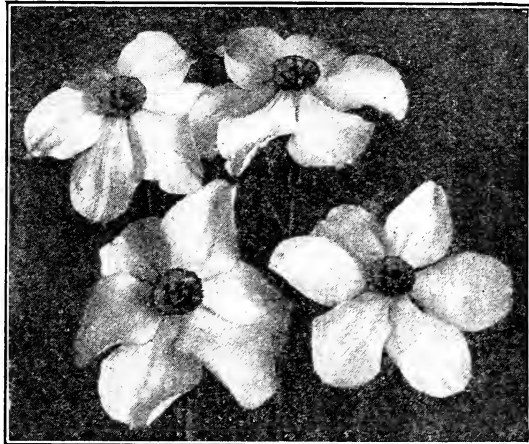
**ORANGE PHOENIX.** Large double white, with orange segments in the center. Each, **6c**; per doz., **60c**; per 100, **\$4.00**.

**SILVER PHOENIX.** Largest of the Double Narcissus, pale creamy white with sulphur, delicate fragrance, fine for cutting or for decorating purposes.

Each, **6c**; per dozen, **60c**; per 100, **\$4.00**.

**VON SION.** The famous "Old Double Yellow Daffodil," rich golden yellow perianth and trumpet; one of the best forcing sorts. . . . . Each, **6c**; per dozen, **60c**; per 100, **\$4.00**.

**VON SION, SELECTED EXTRA LARGE.** True Northern grown Dutch Bulbs. Each, **8c**; per doz., **80c**; per 100, **\$6.00**. Price Per Dozen and Single Bulb Includes Postage.



Narcissus Poeticus

## Narcissus Poetaz Hybrids

**THESE** new hardy cluster-flowered hybrids between Poeticus and Polyanthus are healthy, strong and tall growers, some of the varieties attaining a height of 2 feet. The flowers are more like Poeticus in character, but are borne in clusters like the Polyanthus. Planted in permanent quarters they form large, luxuriant clumps.

**ALSACE**, very early flowering, color pure white with yellow cup faintly edged red on opening.

Each, **7c**; per dozen, **65c**; per 100, **\$5.00**.

**ELVIRA**, pure white with yellow eye, large flower of good substance, 3 to 4 flowers on a stem; strong grower.

Each, **7c**; per dozen, **65c**; per 100, **\$5.00**.

**IDEAL**, pure white with dark orange eye, large truss of 6 to 7 flowers, beautiful color.

Each, **7c**; per dozen, **65c**; per 100, **\$5.00**.

**IRENE**, sulphur yellow, changing to light yellow, orange eye; large broad truss bearing 8 to 9 flowers.

Each, **7c**; per dozen, **65c**; per 100, **\$5.00**.

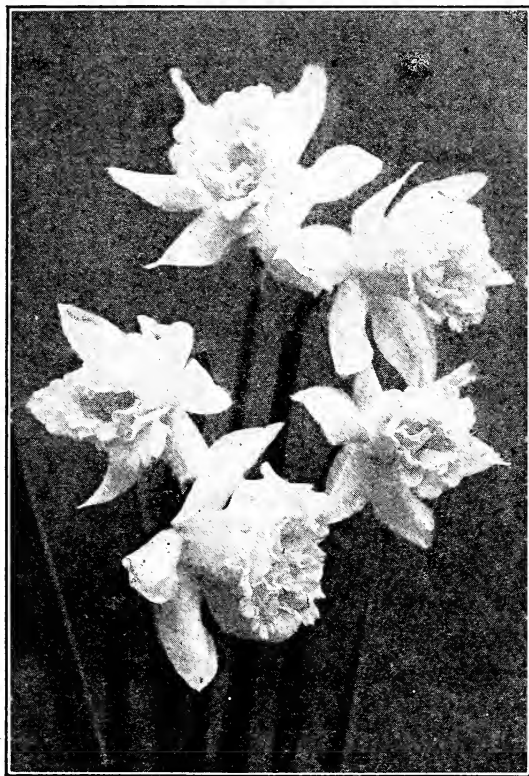
**TRIUMPH**, perianth white, with yellow eye, the largest flowers of this section, 3 to 4 flowers on a stem.

Each, **7c**; per dozen, **65c**; per 100, **\$5.00**.

### IF YOU WANT FLOWERS

In your House this Winter or in your garden next Spring  
**YOU MUST PLANT BULBS THIS FALL**

Prices per  
Dozen and  
Single Bulb  
Include  
Postage



Narcissus Double Von Sion

## Polyanthus Narcissus

**BEAUTIFUL**, free flowering, deliciously sweet scented flowers of the easiest culture; suitable for forcing or for growing in water in the same way as the Chinese Sacred Lilies. Their tall spikes of bloom, bear from 6 to 12 flowers each. If planted in open borders, they must be well protected by a covering of litter.

**PAPER WHITE GRANDIFLORA.** An improved large flowering form of the Paper White, possessing all the good qualities of that popular and easily-grown variety. It is more vigorous and earlier, producing pure white flowers of large size and good substance in large trusses. Is largely used for early forcing for cut flowers, being brought in without difficulty early in December. Can be grown in bowls of water and pebbles the same as Chinese Lilies.

**Selected Bulbs.** . . . . . Each, **5c**; per dozen, **45c**; per 100, **\$3.25**.

**Mammoth Bulbs**, of special value for growing in water.

Each, **6c**; per dozen, **50c**; per 100, **\$4.00**.

	Each	Per Doz.	Per 100
<b>GRAND MONARQUE</b> , pure white flowers of largest size, with yellow cups; borne on large heads. . . . .	<b>\$0.07</b>	<b>\$0.65</b>	<b>\$5.00</b>
<b>GRAND SOLIEL D'OR</b> , rich yellow flower with orange cup. . . . .	<b>.07</b>	<b>.65</b>	<b>5.00</b>
<b>GLORIOSA</b> , white with orange cup. . . . .	<b>.07</b>	<b>.65</b>	<b>5.00</b>
<b>MONT CENIS.</b> A splendid large flowered variety having broad round over-lapping petals of white, and large rich yellow cup; of compact growth, carrying large clusters of flowers. . . . .	<b>.07</b>	<b>.65</b>	<b>5.00</b>
<b>MIXED POLYANTHUS NARCISSUS.</b> . . . .	<b>.05</b>	<b>.45</b>	<b>3.25</b>



Narcissus Paper White Grandiflora

Persons purchasing Narcissus at our counters or who wish to pay their own express charges may deduct 5c per dozen from these prices when bought by the dozen. Prices per 100 not prepaid.





Chinese Sacred Lily

It is not absolutely necessary to put the bulb in the dark, but, if shaded until the leaves begin to grow, better results may be obtained. By making a small incision across the top of the bulb, in two or three places, about three-quarters of an inch from the center it will cause a fresh lot of leaves and flower stalks to start from these points. This must be done with care, so as not to injure the bulb—simply cut the skin. For a window ornament they are unexcelled, and lend to an interior a cheerful aspect when all outside is frostbound and dreary. The effect is heightened when several are put in a large dish. They can be planted at different times, and have a succession of flowers all winter. Flowers often double and single from the same bulb.

**MAMMOTH BULBS**, each, 15c, (if by mail, 20c each); by express not prepaid, per dozen, \$1.60.

Original baskets containing 30 bulbs, \$3.50.

**LILY BOWLS**. For Chinese Sacred Lilies and Polyanthus Narcissus: Imitation cut glass, to hold one bulb, each, 25c; for 3 bulbs, 30c.

**PEBBLES**, for filling Lily Bowls, per quart, 10c.

## Calla Lilies (Richardia)

An old favorite, and of easy culture, the only requisite for successful culture are rich soil and plenty of water when growing. By allowing them to rest through the Summer, an abundance of bloom may be had the following winter.

**White Calla or Lily of the Nile**. This old favorite is too well known to require any description.

**Monster Bulbs**..... postpaid, each, 30c; per dozen, \$3.00.

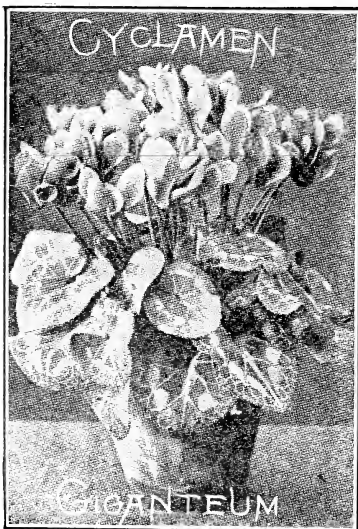
**Extra Large Bulbs**..... postpaid, each, 20c; per dozen, \$2.00.

**Large Bulbs**..... postpaid, each, 15c; per dozen, \$1.50.

**Burbank's Golden Hybrid**. A yellow Calla of great beauty. It has the habit of growth of the white variety, with flowers of same size and shape but of a rich golden-yellow color; the foliage is dark green, with a number of creamy-white spots, which add much to its beauty..... Each, 30c; per dozen, \$3.00.

**Godfrey or Everblooming Calla**, short sturdy growth; very free flowering; medium sized white flowers; excellent for cutting. Each, 25c; per dozen, \$2.50.

**Spotted Leaf Calla (Richardia Alba Maculata)**. This plant is always ornamental, even when not in flower, the dark green leaves being beautifully spotted with white. In addition to its usefulness as a pot plant it makes a fine thing for planting in the garden in the Summer, being very effective. Postpaid, each, 20c; per dozen, \$2.00.



## Cyclamen Persicum Giganteum

One of the most beautiful and best adapted plants for Winter blooming in the house or greenhouse; grows readily and flowers freely for a long period; the foliage being handsomely mottled, is very ornamental. The bulbs should be planted in a compost of loam, leafmould, and sand, about half covered, leaving the crown or top of the bulb clear; give a little water and keep in the shade until the leaves are well grown. Then, with plenty of light, air and temperature of about 60 degrees, they may be grown to perfection. Good drainage is essential. After flowering, the pots should be plunged in a shady, sheltered place until October, when they should be repotted.

We have this season secured a fine stock of these bulbs from one of our principal American specialists.

**Finest Mixed Varieties**..... Each, 25c; per dozen, \$2.50.

## Tonquils

**EXCELLENT** for early blooming. Charming, large, golden and deliciously odoriferous flowers, freely produced, of the finest effect either in garden, greenhouse or conservatory. May be successfully grown by everyone. Put six in a five inch pot and treat same as Hyacinths.

	Each	Per Doz.	Per 100
<b>Campernelle Rugulosus Double Flowering</b> , a double form of the large flowering Campernelle; a novelty of great merit.....	\$0.05	\$0.45	\$3.25
<b>Double</b> , fine golden yellow, very fragrant.....	.05	.40	3.00
<b>Campernelle</b> , single, golden yellow, very large and fragrant.....	.05	.40	3.00
<b>Odorus Rugulosus</b> , large flowering, deep yellow, crinkled flowers, exceedingly fragrant and very desirable for forcing or open garden.....	.05	.45	3.25
<b>Single</b> , sweet-scented, deep yellow.....	.05	.40	3.00

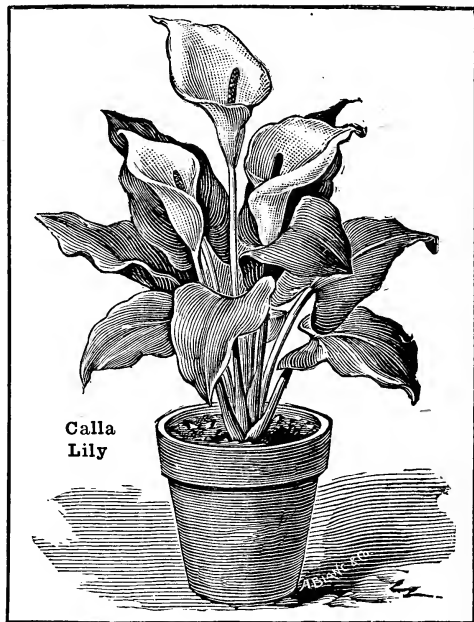
## Chinese Sacred Lily or Oriental Narcissus

**A**LL orders should include these bulbs, as they have become most popular through their own merits, flowering in water and gravel in five to six weeks from time of planting.

They grow well in pots of soil, but the most popular way of blooming them is as follows:

Put about one inch of sand in a shallow bowl, or similar vessel, about four inches deep; place the bulb on this, and pack it firmly with small pebbles or pieces of rock; then fill it with water to the top of pebbles, and place in a warm sunny window. The bulb will at once commence a rapid growth, and bloom in five or six weeks. Add fresh water as often as necessary.

Put about one inch of sand in a shallow bowl, or similar vessel, about four inches deep; place the bulb on this, and pack it firmly with small pebbles or pieces of rock; then fill it with water to the top of pebbles, and place in a warm sunny window. The bulb will at once commence a rapid growth, and bloom in five or six weeks. Add fresh water as often as necessary.



# Lilies

**NO CLASS** of plants capable of being cultivated out of doors possesses so many charms; rich and varied in color, stately and handsome in habit, profuse in variety, and of delicious fragrance, they stand prominently out from all other hardy plants, and no herbaceous border, however select, should be without a few of its best sorts. With a well selected collection Liliums may be had in bloom from June till October.

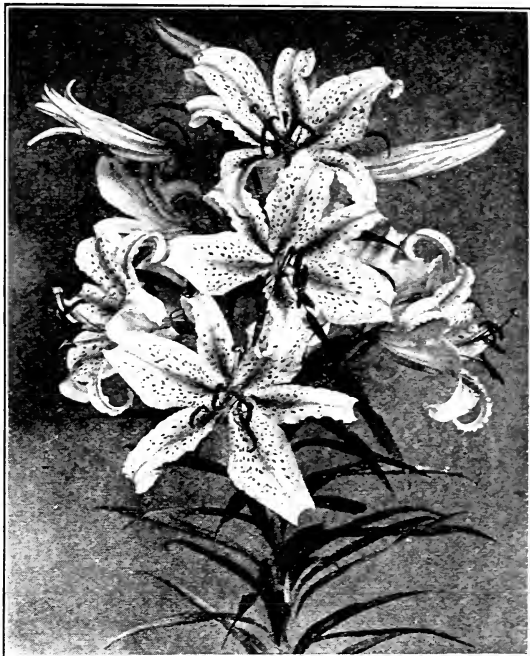
**Culture.**—They should be planted in good, rich, loamy soil, abundantly mixed with very rotten cow manure. Plant about four inches deep, and during the Winter it is advisable to cover the surface of the bed with a thin layer of manure, which will not only afford a slight protection to the bulbs, but will materially enrich the soil. In Spring the manure may either be removed or dug in between the rows.

**Pot Culture.**—The best soil to use is a rich loam, with the addition of one-third well-rotted manure. Select a large sized pot, say eight or ten inches, so as to allow of deep planting—a most essential matter where there are upper roots to protect. Dust a little charcoal about the bulb to keep it fresh, and cover at least two inches with soil.

After potting, one of the most important things to observe is the proper placing of the pots containing the bulbs. Like all other bulbs, to get the best results in flowering, the pots must be filled with roots before the top starts to grow; and to do this, they must be placed in some cool place and excluded from the light, until, on examination the roots are found to be formed around the ball of earth.

Orders for Lilies cannot be filled before November, excepting for *Candidum* and *Harrisii*, which are ready August 1.

Prices on single bulbs are postpaid. By the dozen or hundred they will be forwarded at expense of purchaser.



**Liliun Auratum**

**AURATUM**, (Golden-banded Lily). Undoubtedly one of the finest. Its large, graceful, fragrant flowers are composed of six petals of a delicate ivory-white color, thickly studded with chocolate crimson spots, and striped through the centre with a golden-yellow band; 3 to 5 feet.

**Large Bulbs**, 8 to 9 inches, each, **35c**; per dozen, **\$3.50**; per 100, **\$25.00**.

**Extra Large Bulbs**, 9 to 11 inches, each, **50c**; per dozen, **\$5.00**; per 100, **\$40.00**.

**CANDIDUM**, (Annunciation or Madonna Lily). One of the most popular of garden Lilies. The flowers are pure white and very fragrant, borne on long stems. To succeed with it, it should be planted early in the autumn, so that it can make some growth before frost; 3 to 4 feet; May-June.

**Large Bulbs**, each **20c**; per doz., **\$1.75**; per 100, **\$12.50**.

**Extra Large Bulbs**, each **25c**; per doz., **\$2.25**; per 100, **\$17.50**.

**HARRISII**, (Bermuda Easter Lily). This splendid Lily is undoubtedly one of the best for house culture, as it comes quickly into bloom and flowers freely. The flowers are trumpet shaped, pure waxy white and delightfully fragrant. Bulbs should be potted in a rich soil, using a five to eight-inch pot, according to the size of bulb, and the pots plunged in a cold frame or kept in a dark, cold place, to get a strong root growth before the top starts; when well rooted they may be brought into gentle heat and forced into bloom.

**Large Bulbs**, 7 to 9 inches, each **50c**; per doz., **\$4.50**; per 100, **\$35.00**.

**LONGIFLORUM FORMOSUM**. The plants are of healthy, strong growth—about 3 feet high and produce beautiful, snow white, trumpet shaped flowers, 6 to 8 inches long. It is perfectly hardy, blooming in the open in June and July. This Lily is also a very important winter flowering type.

**Large Bulbs**, 7 to 9 inches, each **50c**; per doz. **\$4.50**; per 100 **\$35.00**.

**LONGIFLORUM GIGANTEUM**. A splendid type, later flowering than the others but of strong, free, healthy growth, and while it can be forced into bloom for Easter it is just the thing for Decoration Day and later flowering; quite hardy and good for outdoor planting.

**Large Bulbs**, 7 to 9 inches, each **40c**; per doz. **\$4.25**; per 100 **\$30.00**.

**REGALE** (The Regal Lily). This grand new species is acknowledged to be the finest Lily in cultivation and is undoubtedly the most popular novelty that has been offered for many years. It is absolutely hardy and is excellent for forcing under glass. The white flowers are long, trumpet-shaped, slightly suffused with pink, with a beautiful shade of canary-yellow at the centre, extending part way up the trumpet. It is delightfully perfumed but without the heavy, oppressive odor of most lilies. Each **75c**; per dozen, **\$7.50**.

**SPECIOSUM**. "Japan Lily" The varieties of this class are magnificent border plants, and also excellent for pot culture. All are perfectly hardy, and are among the most satisfactory Lilies to grow.

**SPECIOSUM. ALBUM**, pure white, very fragrant. . . . . **Large Bulbs**, 8 to 9 in., each **35c**; per doz., **\$3.50**; per 100, **\$25.00**.

**Extra Large Bulbs**, 9 to 11 inches, each **50c**; per doz., **\$5.00**; per 100, **\$40.00**.

**SPECIOSUM. RUBRUM or ROSEUM**. White, suffused and spotted with crimson.

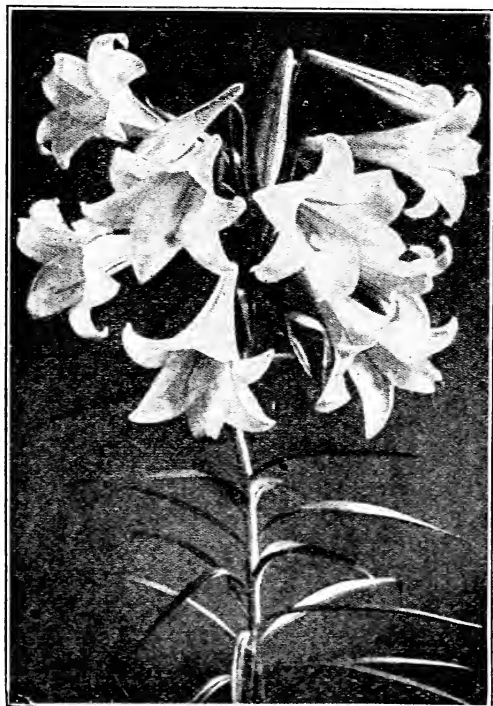
**Large Bulbs**, 8 to 9 inches, each **35c**; per doz., **\$3.50**; per 100, **\$25.00**.

**Extra Large Bulbs**, 9 to 11 inches, each **50c**; per doz., **\$5.00**; per 100, **\$40.00**.

**TIGRINUM**. "Tiger Lily." Orange salmon, spotted with black. . . . . Each **20c**; per doz., **\$2.00**; per 100, **\$15.00**.

**TIGRINUM FLORA PLENO**. "Double Tiger Lily." This is a plant of stately habit, bearing an immense number of double, bright orange red flowers, spotted with black, 3 to 5 feet. August. . . . . Each **25c**; per doz. **\$2.50**; per 100 **\$20.00**

If you contemplate making a Lily bed, kindly give us dimensions of same, and we will be pleased to submit you an estimate, stating suitable varieties and lowest cost



**Liliun Longiflorum Giganteum**

## Freesia

**THIS** is one of the most popular and charming bulbs we offer for pot culture, flowering in the winter and spring, in the conservatory or window garden. Six bulbs should be planted in a four inch pot. They force readily, and can be had in bloom by Christmas if desired. The flowers are produced six to eight on stems about nine inches high, and are particularly useful for cutting, remaining in good condition, kept in water for two weeks; the flowers are pure white, with a yellow blotched throat, and are exquisitely fragrant.

**Improved Purity.** A distinct and greatly improved type producing large sprays of pure white flowers of immense size and delicious fragrance. It is very free blooming and of great value for forcing for cut flowers.

**Large Bulbs.**.....Per dozen, **30c**; per 100, **\$1.75**.

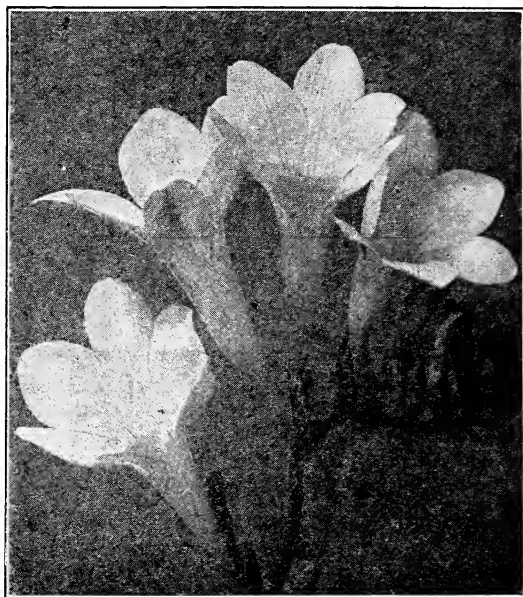
**Mammoth Bulbs.**.....Per dozen, **40c**; per 100, **\$2.50**

**Monster Bulbs.**.....Per dozen, **50c**; per 100, **\$3.50**.

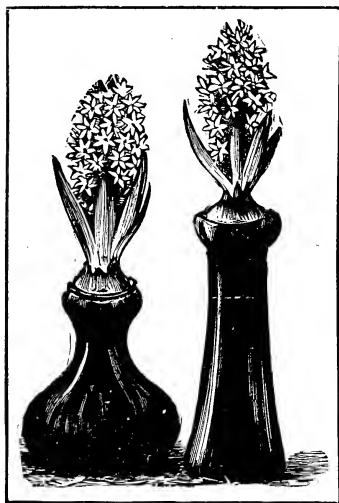
**Rainbow.** We can now supply this long waited for, beautifully colored Freesia. Limited quantity in following colors—**Blue, Lavender, Pink and Yellow.**

**Large Bulbs.**.....Per dozen, **75c**; per 100, **\$5.00**.

Purchasers paying transportation charges may deduct 3c per dozen and 10c per 100 from these prices.



**Freesia, Improved Purity**



## Lily of the Valley

**PLANT** in a shady place where they will not be disturbed for several years.  
**Clumps.** For out of door planting.....Each, **35c**; per dozen, **\$3.50**.  
Can only be sent by express or freight at purchaser's expense.

## Hyacinth Glasses

**Hyacinth Glasses CAN NOT be sent by mail**

**BELGIAN or TALL SHAPE**—Blue, Claret, Crystal and Green Colors.

Each, **25c**; per dozen **\$2.75**.

**LILY BOWLS.**—For Chinese Sacred Lilies and Polyanthus Narcissus.

**Imitation Cut Glass**—to hold one Bulb.....Each, **25c** for 3 Bulbs, **30c**.

**PEBBLES.**—For filling Lily Bowls, **10c** per quart.

## Mushroom Spawn

**MUSHROOMS** can be successfully and profitably grown during the winter and spring months in frames under greenhouse benches, in the open fields, or in cellars or out-houses.

**One pound of Spawn is sufficient for a bed 2 x 6 feet.**

We supply many of the largest commercial growers in the United States and have on hand at all times in the season fresh Spawn of the best manufacture.

**English Milltrack Mushroom Spawn.** Our celebrated English Milltrack brand (made by the best maker in England especially for our trade) has gained an enviable reputation among critical growers for its uniform good quality, and can be thoroughly relied upon to produce a good crop of the best Mushrooms. Commercially, it is more planted than any other Spawn. It comes in pressed bricks weighing about 20 ounces. They are broken into pieces the size of a walnut and put sidewise in the beds 10 to 12 inches apart each way. Prices, by express—customer to pay charges—per brick, **25c**; per lb., **20**; 10 lbs., **\$1.75**; 100 lbs., **\$12.00**. By mail, **30c** per brick, postpaid.

**Treatise on Mushroom Culture, 10c**, or given with an order of 10 lbs. of Mushroom Spawn.

**Mushroom Culture.** (Wm. Falconer.) The most practical work on the subject; **\$1.00**.



**American Made Pure Culture Mushroom Spawn.** A very superior article, made in this country from carefully selected spawn, which it is claimed is much more vigorous than the imported article, and will produce Mushrooms of a very superior quality and flavor. The popularity of Pure Culture Spawn is increasing rapidly and many of the large growers are now using it. They claim it is a surer crop. Amateurs have much the best results with this kind. By express—customer to pay charges—per brick, **30c**; 5 bricks, **\$1.25**; 100 bricks, **\$20.00**. By mail, **35c** per brick; 5 bricks, **\$1.50**, postpaid.

**Special Prices will be given to those who use Mushroom Spawn in quantity.**

# McCullough's Selected Flower Seeds

FOR FALL AND WINTER SOWING

ON the following pages we give a list of the **Best Hardy Perennials** which are now so deservedly popular. Sown this fall in a cold frame or protected corner of the garden, you can have, with little trouble, an abundant supply of Columbines, Canterbury Bells, Delphiniums, Foxgloves, Gaillardias, Hollyhocks, Forget-me-nots, Daisies, Sweet Williams, etc., the following season. The list also includes a choice selection of other Flower Seeds for Autumn sowing, such as Cyclamens, Pansies, Primulas, etc.

## Discount on Packet Flower Seeds

For 25 Cents select 6 Five-cent, or 3 Ten-cent pkts. For 50 Cents select Packets to the amount of 65 Cents. For \$1.00 select Packets to the amount of \$1.30. For \$2.00 select Packets to the amount of \$2.65. For \$3.00 select packets to the amount of \$4.00. **FULL CULTURAL DIRECTIONS ON EACH PACKET. WE PAY THE POSTAGE.**

## ABUTILON (Chinese Bell Flower.)

**ELEGANT** flowering plants of strong growth and easy cultivation, producing various colored, drooping bell-shaped flowers. Sown indoors any time before April, they will produce plants that will flower outdoors the first season and indoors all Winter. *Half-hardy Perennial.*

**Fine Mixed.** Of choice varieties and colors. . . . . 10c pkt.

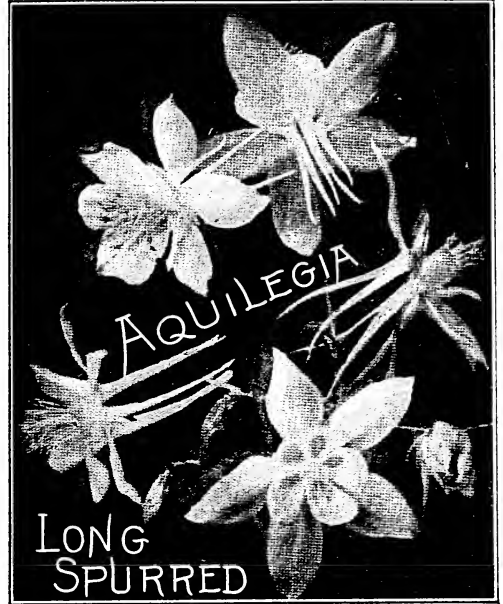
## ALYSSUM (Mad-Wort)

**PRETTY** little plants for beds, vases, baskets, edgings or rock work, blooming profusely all Summer; useful also for Winter-flowering. *Hardy Annual.*

**Alyssum, Sweet.** Of trailing habit; flowers white. The popular old-fashioned sort. . . . . ¼ oz., 10c; oz., 25c; 5c pkt.

**Alyssum, Little Gem, or Carpet of Snow.** The plants commence to bloom when quite small, and will flower all Summer until late in the Fall. . . . . ¼ oz., 15c; oz., 50c; 5c pkt.

**Alyssum, Saxatile Compactum.** (Basket of Gold, Gold Tuft, Rockmadwort.) A fine plant for the rocky or border, grows 1 foot high and produces broad flat heads of yellow flowers in May. *Hardy Perennial.* . . . . . 5c pkt.



## ANTIRRHINUM (Snapdragon)

**ANTIRRHINUMS** or Snapdragons are one of the best cut flowers which can readily be grown from seed. For early flowering, sow in fall, protecting the plants with a covering of leaves through the winter. *Half-hardy Perennial.* (See cut.)

### TALL, GIANT FLOWERING

Flowers nearly double the size of the older sorts.

**Brilliant.** Scarlet, gold and white. . . . . 10c pkt.

**Fire King.** Scarlet with orange. . . . . 10c pkt.

**Golden King.** Golden yellow flowers. . . . . 10c pkt.

**Queen Victoria.** Very beautiful, bearing immense flowers, white shaded cream, with lemon-colored lip. The best white. . . . . 10c pkt.

**Venus.** Light rose, white throat. . . . . 10c pkt.

**Tall Giant Mixed.** A splendid mixture, containing all the colors; magnificent large individual flowers. . . . ¼ oz., 30c; oz., \$1.00. 5c pkt.

### SEMI-DWARF GIANT FLOWERING.

Are particularly good for bedding, as they require no staking. The flowers are most wonderful, in many new shades and tints.

**Silver Pink.** Delicate rosy pink, seemingly covered with a silver sheen. . . . . 10c pkt.

**Queen of the North.** Grows 1 foot in height, densely covered with large white flowers. Also valuable for pot culture. . . . . 10c pkt.

**Daphne.** Soft blush pink. . . . . 10c pkt.

**Golden Queen.** Pure yellow, very fine. . . . . 10c pkt.

**Firebrand.** Rich deep red. . . . . 10c pkt.

**Half-Dwarf Mixed.** Large variety of colors; best for bedding. . . . ¼ oz., 20c; 5c pkt.

## AQUILEGIA, OR COLUMBINE

**CHARMING** hardy plants, bearing in countless numbers through May and June exquisite clear blue, white, rose, yellow, purple and striped blossoms. For planting in permanent borders or edges of shrubbery this old-fashioned favorite is one of the best. They thrive well with ordinary garden culture, but do best in partially shaded nooks. Few hardy plants are so easily grown from seed. Will bloom first season if sown very early. *Hardy Biennials.*

**Coerulea Hybrida, "Rose Queen".** A beautiful variety, producing in great profusion very graceful, large-flowered, long-spurred flowers, shading from light pink to dark rose with white center and yellow anthers. . . . . 3 pkts., 25c; 10c pkt.

**McCullough's Long-Spurred Hybrids.** A beautiful strain, comprising shades and combinations of blue, white, yellow, orange, scarlet and bright rose pink in large flowers with long spurs; the finest to be had. (See cut.) . . . . . 3 pkts., 25c; 10c pkt.

**Double,** all colors, mixed. . . . . ¼ oz., 20c; 5c pkt.

**Single,** all colors, mixed. . . . . ¼ oz., 20c; 5c pkt.





## FLOWER SEEDS—Continued

### BELLIS (English Daisy)

**A** FAVORITE perennial plant, which will stand the winter if given the protection of a few leaves or litter; in bloom from early Spring until well on in the Summer. The seed we offer is saved from the finest double varieties. *Half-hardy Perennials.*

**Longfellow.** Large, double, dark pink flowers; with long, stiff stems. .... **10c pkt.**

**Snowball.** A beautiful white variety with long stems, and very double flowers; fine for cutting. .... **10c pkt.**

**Giant Double.** Beautifully and densely imbricated flowers, 1½ inches in diameter. Finest mixed. .... **10c pkt.**

### CALCEOLARIA

**U**NSURPASSED for pot culture in the greenhouse or conservatory, producing their brilliant flowers in great profusion and variety. *Greenhouse Perennial.*

**Hybrida Grandiflora.** Large flowers of fine form and substance; rich colors, beautifully spotted and marbled. The finest strain in cultivation. .... **25c pkt.**

### CAMPANULA

(Canterbury Bells)

**T**HIS old-fashioned flower is a favorite with all. Stately and showy, and of the easiest culture. The seeds should be sown about April, in finely prepared, rich soil. *Hardy Biennial.*

**Calycanthema.** (Cup and Saucer Canterbury Bells.) They differ from the ordinary type in having an extra large calyx, which is of the same color as the flower, giving the appearance of a cup and saucer. **Pink.** Delicate rosy-pink. **10c pkt.** **Blue.** A fine clear shade. **10c pkt.** **White.** Pure white. .... **10c pkt.** **Finest Mixed.** All colors of the Cup and Saucer type. ¼ oz., **50c; 5c pkt.**

**Medium.** (Single Canterbury Bells.) The old-fashioned sort, with beautiful, large bell-shaped blossoms. **Blue.** .... **10c pkt.** **Rose.** .... **10c pkt.** **White.** .... **10c pkt.** **Single Mixed.** All colors. ¼ oz., **25c; 5c pkt.**

**Double Mixed.** All the double flowering Medium varieties. ¼ oz., **40c; 5c pkt.**

### CANDYTUFT

**U**NIVERSALLY known and cultivated, and considered indispensable for cutting; one foot. *Hardy Annual.*

**Giant Hyacinth Flowered.** The finest of all the white varieties, being a complete mass of pure white flowers, in a pyramid of bloom. ½ oz., **25c; oz., 40c; 5c pkt.**

**Little Prince.** Very large heads of pure white flowers; fine for borders and pots; 6 inches. .... **5c pkt.**

**Rose Cardinal.** Bright carmine rose. .... **5c pkt.**

**White Rocket.** Pure white. .... **Oz., 25c; 5c pkt.**

**Dwarf Hybrids Mixed.** .... **5c pkt.**

**Mixed Colors.** .... ½ oz., **15c; Oz., 25c; 5c pkt.**

**Sempervirens.** A profuse white-blooming plant, coming in flower early in the Spring; much used for cemeteries, rockeries, etc., 1 foot. *Hardy Perennial.* .... **5c pkt.**

### CARNATION

**C**ARNATIONS are general favorites for their delicious fragrance and richness of colors. They are indispensable, both for greenhouse culture in Winter and for the garden in Summer. The Marguerite type is best for Summer flowering. *Half-hardy Perennial.*

**Earliest French Mixed.** .... ¼ oz., **50c; 10c pkt.**

**Marguerite.** Finest Mixed; excellent for cutting. ¼ oz., **50c; 5c pkt.**

### CINERARIA

**A** WELL-KNOWN greenhouse plant, having a range and brightness of color scarcely surpassed. It may be had in bloom through the greater part of the year. *Greenhouse or Tender Annual.*

**Hybrida Grandiflora.** This strain of Cineraria can not be surpassed, either for size of flowers or beauty of color. Many of the blooms measure 2½ inches in diameter. We have received very flattering reports from florists and private gardeners of their success with our Cineraria seed. .... **25c pkt.**

### COREOPSIS

**Lanceolata Grandiflora.** Large, showy, bright yellow flowers, produced in the greatest abundance from June till frost. Easily grown from seed, flowering the first year is sown early. *Hardy Perennial.* ¼ oz., **25c; 10c pkt.**

### CYCLAMEN

**Giant-Flowered.** (Persicum Giganteum.) A popular pot-plant for Winter and Spring-flowering. Seedlings bloom in eight to ten months. *Greenhouse Perennial.*

Best strains, mixed. .... **25c pkt.**

### DELPHINIUM

(Hardy Perennial Larkspur)

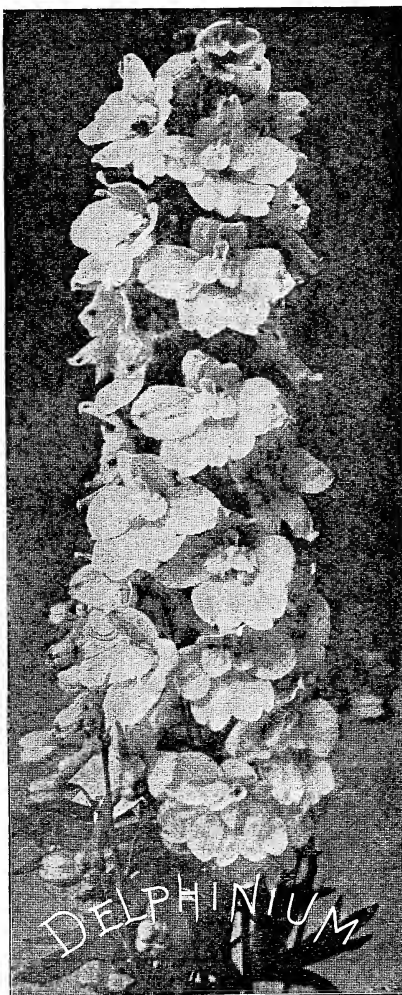
**O**NE of the most exquisite blue-tinted flowers that we have. Very effective planted in beds, masses or borders. Plant 1½ to 2 feet apart each way. Perennial varieties should be sown in the Fall or very early in the Spring, transplanting to the open ground. *Hardy Perennial.*

**Chinese Varieties, Mixed.** This mixture contains a great variety of shades, from pure white to gentian-blue. .... **5c pkt.**

**Elatum** (Bee Larkspur.) Rich deep blue, very free bloomer, 4 feet. **5c pkt.**

**Formosum.** Beautiful spikes of brilliant rich blue flowers with a white center, 2½ feet. .... **5c pkt.**

**Giant-Flowering Hybrids.** These magnificent Hybrids, the grandest of Delphiniums in existence, produce beautiful spikes of immense flowers, single, semi-double and double. Flower spikes are from 2 to 3 feet in length. Colors are beautiful, ranging from pure white through all shades of lavender and blue. (See cut.) .... **10c pkt.**



Delphinium, Giant Hybrid

### DIANTHUS, or Pinks

This splendid class of Pinks should be in all gardens. They have the delightful clove fragrance. *Half-hardy Perennial.*

**Plumarius Fl. Pl.** (Double Hardy Garden Pinks). Double and semi-double varieties in beautiful colors. .... **10c pkt.**

**Plumarius Semperflorens** (Everblooming Hardy Garden Pink). Very beautiful, sweet-scented, double, semi-double and single flowers, in great diversity of colors. .... **15c pkt.**

**DIANTHUS BARBATUS.** (See Sweet William.)

### DIGITALIS (Foxglove.)

**H**ANDSOME and highly ornamental hardy plants of stately growth. They are now used extensively with good effect for naturalizing in shrubberies, the edge of woods and other half-shady places; 3 to 5 feet. *Hardy Biennial.*

Finest Mixed. .... **10c pkt.**



## FLOWER SEEDS—Continued

### GAILLARDIA (Blanket Flower)

**Grandiflora.** The finest strain of Perennial Gaillardias. The flowers are of enormous size, and the colors the most varied. This is one of the *hardy perennial* plants that no garden should be without. In flower for about three months. 2 feet. (See cut.) 3 pkts., 25c; 10c pkt.

### HIBISCUS (Marshmallow)

**SHOWY** ornamental perennial plants, for mixed beds or shrubbery borders; blooms first year if sown early.

**Mallow Marvels.** Immense flowers from 8 to 10 inches in diameter, in following colors; fiery crimson, blood red, shell pink and white. Their great beauty surpasses all other perennials in profusion of bloom and brilliancy of color. They come up year after year and are absolutely hardy. *Hardy Perennial*.....10c pkt.

### HOLLYHOCK

**ONE** of the most majestic of hardy plants, and a clump or line in any garden gives an effect not attainable with any other plant. For planting among shrubbery or forming a background for other flowers it is without an equal. Seed sown any time before mid-summer will produce fine plants for flowering next year. To get results this season it is necessary to get year-old plants. These we offer with other hardy plants under their proper heads. *Hardy Perennial*.

**Chater's Double Pink**.....10c pkt.  
**Chater's Double Scarlet**.....10c pkt.  
**Chater's Double White**.....10c pkt.  
**Chater's Double Yellow**.....10c pkt.

**Chater's Prize, Double Mixed.** This strain stands unrivaled in richness and delicacy of coloring, with magnificent spikes of very double flowers. (See cut.).....3 pkts., 25c; 10c pkt.

**Ever-blooming.** Double and semi-double flowers. Colors vary from white to blood-red and black.....10c pkt.  
**Mammoth Fringed Allegheny.** Mammoth flowers of loosely arranged fringed petals. The colors vary from the palest shrimp pink to deep red. The plants are of strong growth, sending up spikes 6 to 7 feet high 3 pkts., 25c; 10c pkt.

### LATHYRUS (Everlasting, or Hardy Pea)

**SHOWY,** free-flowering climbers for covering old stumps, fences, etc.; continually in bloom; fine for cutting. *Hardy Perennial*.

**Latifolius "White Pearl."** The finest white variety. 10c pkt.

**Pink Beauty.** Rosy pink.....10c pkt.

**Mixed.** All colors..... $\frac{1}{4}$  oz., 15c; oz., 40c; 5c pkt.

### MIGNONETTE (Reseda)

A well-known favorite. No garden is complete without a bed of Mignonette. *Half-hardy Annual*. (See cut.)

**Allen's Defiance.** Enormous spikes, with individual florets of immense size, fragrant, excellent for forcing. Oz., 75c; 10c pkt.

**Machet.** Dwarf pyramidal growth, large spikes; deliciously fragrant; one of the best for forcing. Oz., 75c; 3 pkts., 25c; 10c pkt.

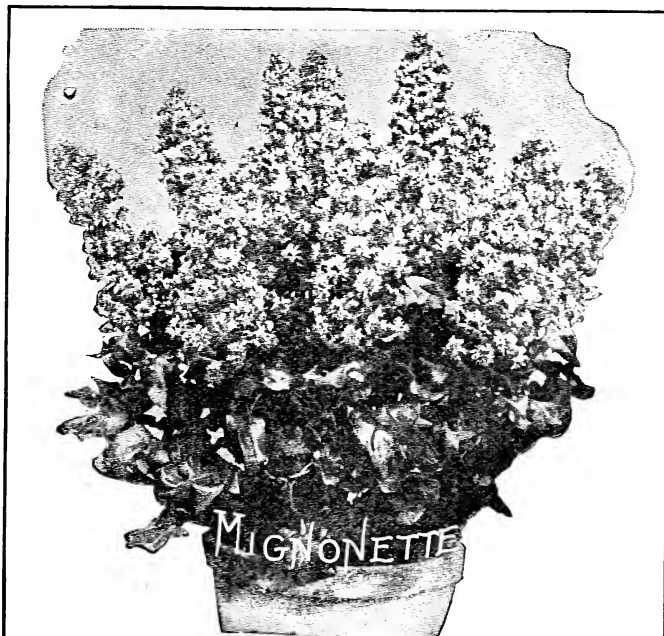
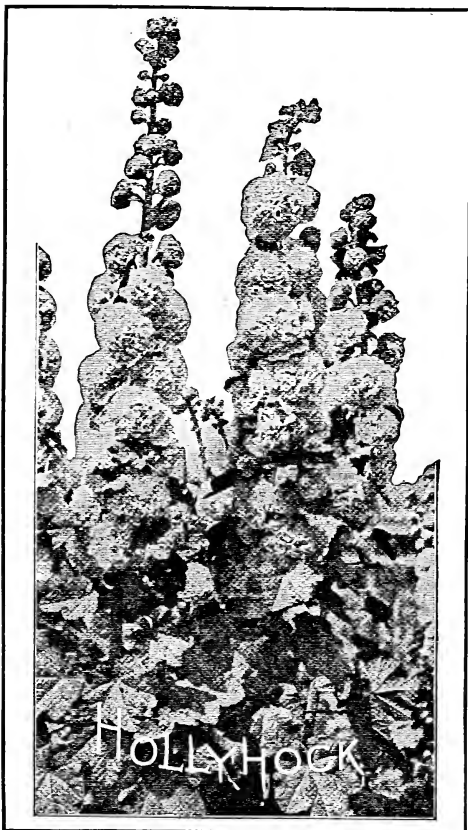
### MYOSOTIS (Forget-me-not)

The Forget-me-nots succeed best in shady, moist situations; *Half-hardy Perennial*.

**Alpestris Victoria.** Early flowering, of bushy habit, bearing large, bright, azure-blue flowers.....10c pkt.

**Palustris.** The true Forget-me-not; beautiful blue flowers; 6 inches. 10c pkt.

**Palustris Semperflorens.** A dwarf Forget-me-not continuing in bloom from early Spring until Autumn; blue flowers. ....10c pkt.



## FLOWER SEEDS—Continued

### PANSY

**PANSY** seed has always been a leading specialty with us. Seed germinates best while soil is still cool and moist. Would advise sowing in shallow drills in seed-bed early in Spring when the trees are starting out in leaf, and again in September when the weather becomes cool. As above stated, plants from the Spring-sown seed flower with great freedom throughout the Spring, Summer and Fall, while the stocky young plants grown in Fall and Winter produce the largest and finest flowers early the following Spring. Take care of the weakest looking seedlings, as they usually give the finest flowers. *Half-hardy Perennial.*

#### MASTODON PANSIES

A new strain of American Grown  
Mammoth Flowering Varieties.

**Adonis.** Light blue flowers, marked with a yellowish-white face and large dark blotches. 2 pkts., 25c; 15c pkt.

**Blue Perfection.** The best dark blue flowers of immense size. 15c pkt.

**Candidissima.** The finest and largest pure white flowers. 15c pkt.

**King of the Blacks.** Flowers of immense size, nearly all jet black and velvety in substance. 2 pkts., 25c; 15c pkt.

**Madame Perrett.** Colors are dark wine, pink and red, with edges of petals frilled and bordered white. 2 pkts., 25c; 15c pkt.

**Meteor.** Flowers a beautiful shade of wine red, very free bloomer. 2 pkts., 25c; 15c pkt.

**Panama Pacific.** Flowers of immense size, deep yellow. 2 pkts., 25c; 15c pkt.

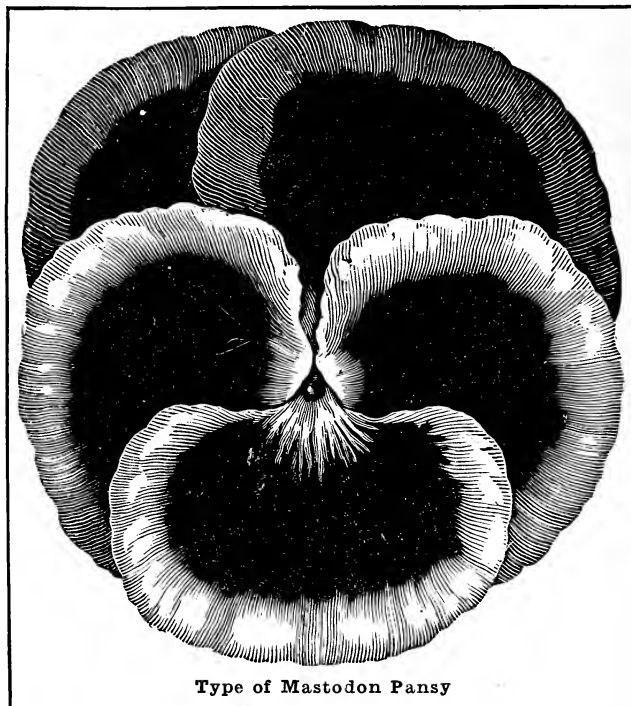
**Parisian Yellow.** Flowers of pure yellow, of grand form and size. 2 pkts., 25c; 15c pkt.

**Vulcano.** Flowers a rich, velvety burgundy-red, of immense size; finest red pansy grown. 2 pkts., 25c; 15c pkt.

**McCullough's "Premier."** This strain is saved from the finest flowers from the best growers of pansies. The plants are compact and of robust growth. Florists and amateurs desiring charming "show" flowers should not neglect this strain, as it is the result of many years careful selection and hybridization. ¼ oz., \$2.00; 25c pkt.

**McCullough's Special Mixture.** A superior mixture, selected from choice, large flowering strains of English, French and other European growers. ¼ oz., \$1.25; 15c pkt.

**Fine Mixture of Bedding Pansies.** The old-fashioned Pansies. Our mixture contains all the most showy and distinctly marked varieties. For freedom of bloom none surpass them. ¼ oz., 25c; 5c pkt.



Type of Mastodon Pansy

### PETUNIA

**FOR** outdoor decoration or house culture few plants equal the Petunia in effectiveness. Easily cultivated, only requiring a good soil and sunny position. *Hardy Annual.*

**Petunia—Double.** *Grandiflora Mixed.* Choicest strains of fine colors and large flowers. 25c pkt.

**Petunia—Single.** *McCullough's Mammoth.* The finest mixture procurable. 3 pkts., 50c; 20c pkt.

### PHLOX DECUSSATA

**A** *Hardy Herbaceous Perennial* and quite distinct from the varieties of Phlox Drummondii, which are annuals.

For best results should be sown as soon as frost is out of the ground in Spring or as soon as gathered in the Autumn.

**Mixed.** All varieties. ¼ oz., 60c; 10c pkt.

### POPPIES

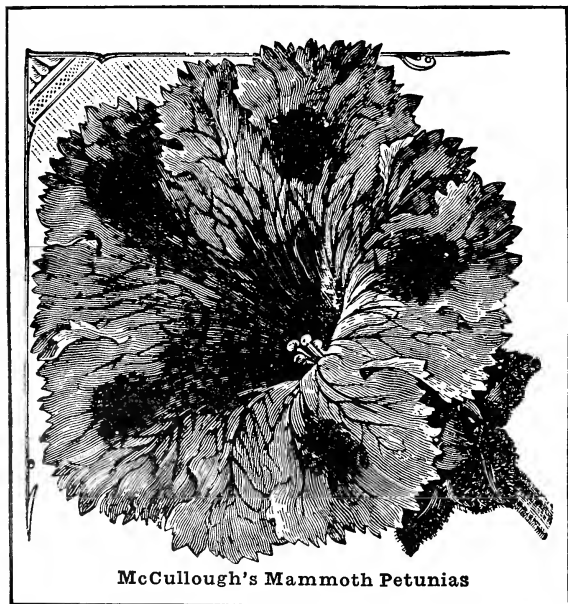
**Hardy Perennial Varieties**

**Iceland.** (*Papaver Nudicaule.*) One of the most effective and beautiful. They are of graceful, neat habit, with bright green, fern-like foliage, formed in tufts, from which issue slender stalks about 12 inches high, bearing their brilliant flowers in endless profusion; most useful for cutting, for which purpose pick when in bud, for if the seed pods are picked off, they continue in flower the entire season. They remain evergreen throughout the Winter, coming into bloom early the following Spring. *Hardy Perennial.*

**Finest Mixed.** All Colors. ¼ oz., 25c; 5c pkt.

**Orientele** (The large Oriental Poppy.) A charming summer-flowering hardy plant, producing numerous leafy stems about 2½ feet high, with large, deep crimson flowers, having a conspicuous black blotch on each petal; exceedingly showy. ¼ oz., 25c; 5c pkt.

**Orientele Hybrids.** Beautiful new hybrids of the Oriental Poppy, producing flowers of immense size; six inches and over in diameter, and of many novel colors, such as salmon, pink, cherry, etc. ¼ oz., 50c; 10c pkt.



McCullough's Mammoth Petunias

# FLOWER SEEDS—Continued

## PRIMULA

**T**HE beautiful Chinese Fringed Primroses and Obconica and Forbesi varieties are indispensable for winter or spring decorations in the home or conservatory. They are one of the most important winter blooming-pot plants. The seed we offer has been saved from the best strains of English and Continental growth.

- Chinensis Fimbriata.** Finest mixed. All colors. .... 20c pkt.
- Forbesi.** (Baby Primrose). Rosy lilac flowers, fine for pots. .... 3 pkts., 25c; 10c pkt.
- Malacoides.** A fine house plant, somewhat like P. Forbesi, but larger in all its parts; flowers delicate lilac. .... 15c pkt.
- Obconica Gigantea.** Strong vigorous growth with immense heads of large individual blooms. .... 2 pkts., 25c; 15c pkt.
- Obconica Grandiflora Fimbriata.** Large flowers with finely fringed and toothed petals; a beautiful pot plant. .... 2 pkts., 25c; 15c pkt.

### Hardy Primroses

- These are among the best of the early spring-blooming plants. *Half-hardy Perennial.*
- Auricula.** Finest mixed. Extra choice; saved from a prize collection. .... 10c pkt.
- Veris.** (Polyanthus). Splendid colors; extra fine. .... 10c pkt.
- Vulgaris.** True English Primrose; canary yellow, fragrant flowers. .... 10c pkt.

## PYRETHRUM

- O**NE of the most valuable of our summer flowers. They flower in May and June, and frequently in August and September the second time. *Hardy Perennial.*
- Pyrethrum—Single Hybrids.** Large flowers, choicest colors, saved from named varieties. Finest mixed. .... 3 pkts., 25c; 10c pkt.

## SCABIOSA

- Caucasica.** (Blue Bonnet). Especially valuable for cutting, the blooms lasting a long time in water; lilac blue; 3 feet. *Hardy Perennial.* .... 10c pkt.
- Japonica.** A *Hardy Perennial* variety from Japan, forming bushy plants 2½ feet in height, and bearing on long wiry stems, beautiful, lavender-blue flowers. A fine cut flower. .... 10c pkt.

## SHASTA DAISY

- A grand, large-flowering Daisy, hardy, robust growth and produces larger and finer flowers each season as the plants increase in strength. .... 3 pkts., 25c; 10c pkt.

## STOCKS (Gilliflower)

- McCullough's Cincinnati Market.** A grand variety producing one long sturdy spike closely set with enormous double white flowers. A fine forcer. .... 3 pkts., 25c; 10c pkt.
- Princess Alice.** (Cut and Come Again). Pure white, one of the earliest. It throws out numerous side branches, bearing clusters of fragrant blossoms. Excellent for cutting. .... 3 pkts., 25c; 10c pkt.

## STOKESIA (Cornflower or Stokes' Aster)

- Cyanea.** A beautiful hardy perennial, growing about 24 inches high; each plant producing 20 to 30 handsome lavender blue, cornflower-like blossoms; in full bloom from July till frost. One of the best hardy border plants. Fine for cutting. .... 3 pkts., 25c; 10c pkt.

## VINCA (Madagascar Periwinkle, or Old Maid)

- Ornamental, free-blooming plants and one of the most satisfactory flowering bedding plants we have. 2 feet. *Tender Annual.*
- Rosea.** Rose, dark eye. .... 10c pkt.
- Alba Rosea.** White, crimson eye. .... 10c pkt.
- Alba Pura.** Pure white. .... 10c pkt.
- Mixed.** .... ¼ oz., 25c; 5c pkt.



## VERBENAS

**T**O have the best results, seeds should be started early in the house and the young plants bedded out by the first of June, and they will make a lavish and showy display of flowers until frost. *Half-hardy Annual.*

- Mammoth Defiance.** Brilliant scarlet, fine for bedding. .... 10c pkt.
- Mammoth Candidissima.** Large trusses of pure white flowers. .... 10c pkt.
- Mammoth Blue.** Bright blue, in various shades. .... 10c pkt.
- Mammoth Pink.** Bright shades of pink. .... 10c pkt.
- Mammoth.** Finest Mixed. A fine strain of beautiful colors and shades. .... 3 pkts., 25c; 10c pkt.
- Gigantea Lucifer.** Flowers intense brilliant scarlet with no eye. .... 10c pkt.
- Gigantea Finest Mixed.** An improvement on Mammoth, flowers very large; giant florets. Choice mixture of colors. .... 10c pkt.

## SWEET WILLIAM

(Dianthus Barbatus)

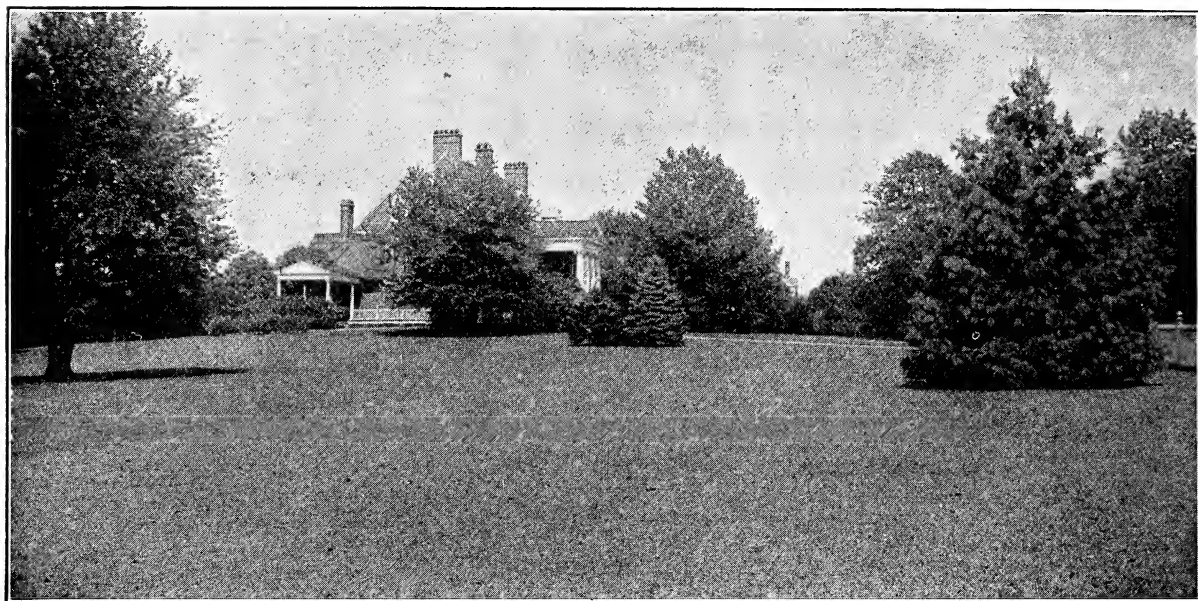
**W**E are pleased to see that the merits of this sturdy, old-fashioned flower are being more generally recognized and its cultivation greatly extended. Beautiful, fragrant and easily grown, it is worthy of a place in every garden. The best varieties of Sweet William are of exceedingly beautiful colors, and the large fragrant flowers are borne in trusses of great size. They make a splendid show in the garden or hardy border and last well as cut flowers. Seed may be sown at any time from Spring to Midsummer. Seed planted early will bloom in the Fall. It is better to sow seed every year to have young plants, as they flower more freely. *Hardy Perennial.* Height, 1½ to 2 feet.

- Pink Beauty.** An exceedingly pretty variety with beautiful salmon pink flowers. .... 5c pkt.
- Holborn Glory.** This strain is a large-flowered selection of the Auricula-Eyed section, the most beautiful and admired of all Sweet Williams. The individual flowers and trusses are of extraordinary size and the range of color, all showing a clear, white eye, is superb. .... 5c pkt.
- McCullough's Selected Single Mixed.** A very choice assortment of all the best single-flowering varieties. .... ¼ oz., 20c; 5c pkt.
- Double Red.** Very effective, rich deep red variety. .... 5c pkt.
- Double White.** Excellent for cut flowers. .... 5c pkt.
- Double Mixed.** This mixture you will find of very superior quality; containing all colors and shades. .... 5c pkt.

## Discount on Packet Flower Seeds

For 25 Cents select 6 Five-cent, or 3 ten-cent packets. For 50 Cents select Packets to the amount of 65 Cents. For \$1.00 select Packets to the amount of \$1.30. For \$2.00 select Packets to the amount of \$2.65. For \$3.00 select Packets to the amount of \$4.00. **FULL CULTURAL DIRECTIONS ON EACH PACKET. WE PAY THE POSTAGE.**

# McCullough's "Suburban" Lawn Grass Seed



## WILL MAKE A BETTER LAWN THAN TURF OR SOD

McCullough's "Suburban"  
Lawn Grass Seed

IS a mixture of the finest Dwarf Evergreen Grasses that grow and flourish during different months of the year so that a rich, deep green, velvety lawn is constantly maintained. Our mixture is the result of several years experimenting, and, as we now offer it, is unequalled. The quantity required for making a new lawn is four bushels (64 lbs.) per acre, or for renovating old lawns, two bushels (32 lbs.) per acre. For a plot 15x20, or 300 square feet, one pound is required for a new lawn, or about one-half pound for renovating.

If it is honestly made, a lawn seed mixture is very much to be preferred to any single grass, because the several varieties of grasses which compose it, mature at different seasons of the year, thus keeping the green sward in good color and condition during the hot weather, not losing its color, as the single variety is liable to do.

**How to Make a Lawn.**—The matchless beauty of a well kept lawn instantly commands the attention of all lovers of the beautiful in Nature, because a fine lawn is an unfailling mark of intelligence and taste, to obtain which the main point is to start right. Seed will make a better lawn than turf or sod. The best soil is a good medium texture; the surface should be thoroughly pulverized and smoothed to the desired grade; remove all large stones, roots and hardened pieces of earth that can not be readily broken, ample time being allowed for the thorough settling of the soil, which is greatly aided by a few heavy showers of rain. When the soil is firm, level and suitably moist, sow "Suburban" Lawn Grass Seed at the rate of four bushels (64 lbs.) per acre. It is unwise to be too economical in the quantity of seed used, if the best results are desired. The seed should be sown broadcast and as evenly as possible, then give a thorough rolling or pat well with the back of a spade. The seed must be well firmed in the soil. When the young grass attains a height of 4 or 5 inches, carefully mow with a sharp scythe. After this, according to the season, it should be mown with a lawn mower every week or ten days.

**General Surface Renovating.**—When your lawn has been established, you will find it to your advantage to lightly re-seed each season. As early as possible, carefully rake off all dead leaves, etc., and give the lawn a dressing of our pulverized SHEEP MANURE, or our PURE BONE MEAL at the rate of at least 500 pounds per acre, and rake in, after which sow our "Suburban" Lawn Grass Seed at the rate of two bushels (32 lbs.) to the acre; roll thoroughly or pat with the back of a spade.

**Renovating in Spots or Patches.**—Everyone is aware that even in the best-kept lawns unsightly spots devoid of grass will appear, which are caused by root-destroying insects; and as these spots are not protected by a covering of turf during the winter, as a natural consequence, the chemical elements in the soil are leached out by the action of the weather, causing them to "cake" or become hard early in the spring. It is useless and a waste of seed to sow these spots unless they are carefully prepared to receive the seed. For this purpose it is our practice to cover them with either of the fertilizers mentioned above at the rate of 13 lbs. for each 300 square feet, then dig these spots up, and after raking until no trace of the fertilizers can be seen, sow our "Suburban" Lawn Grass Seed at the rate of 1 lb. to each 300 square feet. Roll thoroughly or pat with the back of a spade. When any weeding is done on the lawn immediately drop a few grains of seed wherever a weed is removed, and while the soil is disturbed press the seed into the soil.

Prices:— $\frac{1}{2}$  lb., 25c; 1 lb., 40c; 5 lbs., \$1.75;  $\frac{1}{2}$  bu., (8) lbs., \$2.65; per bu. of 16 lbs., \$5.00.

Postage Must Be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.

Pulverized Sheep Manure and Pure Bone Meal are the Best Fertilizers for Lawns. See Fertilizers.



# MCCULLOUGH'S

## "SHADY-PLACE" LAWN GRASS SEED

ON nearly all lawns there are more or less shady places, which result in having bare and unsightly spots on which the owners have difficulty in securing a satisfactory stand of grass. After many years of experimenting with different grasses, both native and foreign, we several years ago developed our present "Shady Place" Lawn Grass Seed Mixture.

This mixture of grasses is adapted for such places, as it is composed of dwarf-growing grasses which are found naturally growing in shady locations. Should the ground have become "sour" or drainage defective, it is apt to be covered with moss. If such is the case, the moss should first be removed by the use of a sharp rake, then apply **Ever Green Lawn Lime** to sweeten it, and after another thorough raking, apply commercial Fertilizer at the rate of not less than 600 pounds per acre, then sow the seed at the rate of four bushels (64 lbs.) per acre, or 1 lb. to each 300 square feet, after which roll thoroughly.

Prices:— $\frac{1}{2}$  lb., 30c; 1 lb., 50c; 5 lbs., \$2.25; 8 lbs., \$3.25; per bushel of 16 lbs., \$6.00.

Postage must be added if wanted by mail. See Postal Rates, second page of cover.



## McCullough's Eden Park Lawn Grass Seed

TO supply the demand for a Lawn Grass Seed that will meet general requirements, it has become necessary to place on the market our "Eden Park." The quality of this lawn grass seed will compare favorably with a majority of the lawn grass mixtures on the market as it contains practically the same grasses as our "Suburban" but without recleaning.

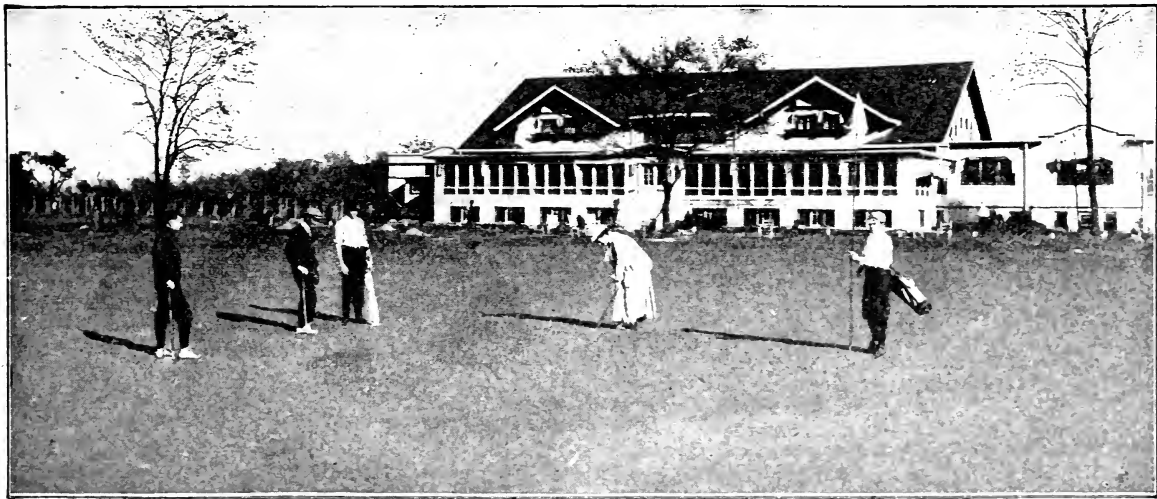
Prices:.....  $\frac{1}{2}$  lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 8 lbs., \$2.15; per bushel of 16 lbs., \$4.00.

## TERRACE MIXTURE

There is nothing more annoying than to have ground washed out. In this mixture we have put quick-growing and deep-rooted grasses. Of course, it depends a great deal on this being well started before very heavy rains.

$\frac{1}{2}$  lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 8 lbs., \$2.65; per bushel of 16 lbs., \$5.00.

## Special Mixtures For Golf Links and Putting Greens



View of one of the Putting Greens on the Golf Grounds of the Hyde Park Country Club, Cincinnati, Ohio, where our Putting Green Mixture has produced a "Green" three weeks from time of sowing the seed.

## PUTTING GREEN MIXTURE

HAVING specialized for over three-quarters of a Century in all varieties of Grass Seeds and having become familiar with the habits and characteristics of all cultivated grasses, we were prepared to develop the Mixture of Grasses herewith offered by us, after making a careful study of the requirements for producing the most substantial turf for Putting Greens.

The numerous testimonials we have received establishes the fact that our Mixture of Grasses will produce the results desired, because it has given thorough satisfaction wherever used, and produces a thick, tough, beautiful green turf. The varieties comprising this Mixture of Grasses are all the finest-bladed, low-growing and most hardy kinds, and will maintain their rich, velvety green color throughout the season.

$\frac{1}{2}$  lb., 30c; 1 lb., 50c; 5 lbs., \$2.25; 8 lbs., \$3.25; per bushel of 16 lbs., \$6.00.

**Quantity of Seed to Sow.** One pound of these mixtures will sow 15 x 20 feet, or 300 square feet. Four bushels should be sown to the acre. For renovating use one-half of this quantity.

**Pulverized Sheep Manure and Pure Bone Meal are the Best Fertilizers for Lawns.** See Fertilizers.

We wish to emphasize the fact that one of the important essentials for success in building lawns, lies in the abundant use of Fertilizers, which should be applied at the rate of not less than 600 pounds per acre.

## GOLF LINKS MIXTURE

WE have given much attention to grasses for golf links. The mixture of grasses we offer below is composed of such varieties as will thrive here, and are the result of experiments conducted on our grounds, as well as careful observation for several years of the practical results obtained on those golf links, for which we have supplied the seed. We have always on hand all the natural grasses of Europe and America and we are familiar with the habits and merits of each. We shall be glad to prescribe for whatever the requirements of the links may be; for poor lands or rich; high and dry, or low and wet.

Per lb., 35c; 5 lbs., \$1.50; 8 lbs., \$2.15; per bushel of 16 lbs., \$4.00.

# McCullough's Grass Seeds



Kentucky Blue Grass

We specialize in Grass Seeds of all kinds and for every purpose.

FOR many years Grass Seeds have been one of our most important specialties, and our improved and perfected facilities for handling same (at a minimum cost), either in small or car lots, enables us to offer our customers the best possible service, both as to quality and promptness in executing orders.

We have four or five different grades of Grass Seeds, especially of the kinds most in demand, such as Clovers, Timothy, Blue Grass, Red Top, Orchard Grass, etc.

We will be pleased to quote lowest market prices on application.

For best results, we advise the use of our highest grades "XXXX" and "buckeye."

We are the largest buyers in this section of high grade Seeds and will always pay the highest market price. Submit samples and name quantity to offer.

Our prices include delivery to freight or express depots here, purchaser paying transportation charges.

We make no charge for burlap bags for Blue Grass, Red Top in Chaff, Orchard Grass, Perennial Rye and other light Grass Seeds.

Seamless bags for Clover, Timothy, Fancy Red Top and other heavy Seeds and Seed Grain are 65c each, extra.

The number of pounds to the bushel, in brackets, is the old way of offering grasses, and is mentioned merely for reference.

We expect to adhere closely to prices quoted in this list, but owing to market fluctuations, it is impossible to guarantee prices.

All orders will be filled at lowest market price on the day of receipt.

Postage Must be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.

## KENTUCKY BLUE GRASS

(*Poa Pratensis*)

ALSO known as June Grass, Green Grass, etc., This is rated as the finest permanent pasture grass. Especially suited to meadows and rich lands. It is the grass of the famous and fertile lime-stone soils of Kentucky, and is no less a favorite all through the Northern States. A perfect lawn grass. Sow 30 to 40 lbs. per acre for lawn; 2 bushels (28 lbs.) to the acre for pasture (14 lbs. per bushel.)

Kentucky Blue Grass Seed, Fancy Cleaned.  
Per lb., 40c; 7 lbs., \$2.50; per bushel of 14 lbs., \$4.50.  
Write for special prices on large quantities and other grades.

NOTE.—We wish to call attention to the fact that Cincinnati is the leading market in the world for Kentucky Blue Grass Seed. We export many carloads annually; the words "McCullough's" and "Kentucky Blue Grass" being very familiar to the principal Seed dealers of the world.

## ORCHARD GRASS

(*Dactylis Glomerata*)

ROUGH Cocksfoot. Perennial. Height, 3 feet. It blossoms about the same time as Red Clover, making it, on that account a desirable mixture with that plant. It is exceedingly palatable to stock of all kinds, and its powers of enduring the cropping of cattle commend it as one of the very best pasture grasses. Sow 25 to 35 lbs. to the acre. (14 lbs. per bushel.) Market price.

## RED TOP GRASS

(*Agrostis Palustris* or *Alba*)

HERD'S Grass, Quick Grass. Perennial; height 1 to 2 feet. Valuable either for lawn mixtures, mixing in hay, or permanent pasture grasses; succeeds almost everywhere, but reaches its highest state of perfection in a moist, rich soil, in which it attains a height of 2 to 2½ feet. Sow, if alone, 40 to 50 lbs. per acre. (14 lbs. per bushel.)

Fancy Red Top Pure Seed.  
Weight, about 30 lbs. per bushel. Sow 10 to 12 lbs. per acre. . . Per lb., 30c; 10 lbs., \$2.50; per 100 lbs., \$21.00.  
Choice Red Top Seed in Chaff.  
Per lb., 20c; 7 lbs., \$1.25; per bu., of 14 lbs., \$2.25.

## Perennial or English Rye Grass

(*Lolium Perenne*)

IMPORTED English Blue Grass. Height, 15 to 24 inches. Considered invaluable for permanent pastures. It produces an abundance of remarkably fine foliage, tillers out close to the ground, and soon forms a compact sward. After being cut it grows up in a very short time, and remains bright and green throughout the season, consequently is well adapted for lawn mixtures. Valuable for shady places. Also a good variety for hay, if cut when in blossom, as it is then most nutritious. Sow, if alone, 50 to 60 lbs. per acre. (24 lbs. per bushel.) Per lb., 25c; 12 lbs., \$2.25; per bushel of 24 lbs., \$3.50.

Impossible to quote firm prices on "Fancy Grass Seeds" at time of going to press.

Write for special prices on New Crop Seeds.



Orchard Grass

## Pacey's Improved Short Rye Grass

SIMILAR to Perennial Rye Grass, but does not grow so tall, consequently is superior for lawn purposes. (24 lbs. per bushel.) Sow if alone, 50 to 60 lbs. per acre.

Per lb., 30c; 12 lbs., \$2.25; per bu. of 24 lbs., \$4.00.

## Meadow Fescue (*Festuca Pratensis*)

(Erroneously called English Blue Grass.)

HIGHLY valuable for permanent grass land. Does not, however, attain its full productive power till the second or third year. Relished by live stock, both in hay and permanent pasture, and is one of the most desirable grasses for general culture. Sow 30 to 40 lbs. to the acre. (24 lbs. per bushel.) This is the true Evergreen Grass of the South. Price on Application.

## Awnless Brome Grass (*Bromus Inermis*)

A HARDY perennial, standing extremes of heat, cold and drought. In the South it remains green all winter. It will grow well on all kinds of soil. The seed should be sown as early in the Spring as the ground can be worked. (10 lbs. per bushel.) Sow 25 to 30 lbs. to the acre. Market Price.

## Bermuda Grass (*Cynodon Dactylon*)

A VALUABLE grass for the South and for tropical climates; will not endure frost. Sow 10 to 15 lbs. per acre. Write for prices.

## Canadian Blue Grass (*Poa Compressa*)

ALSO called Flat-stemmed Poa, Flat-Stalked Meadow Grass. Grows a foot or more high. Recommended for horses, cows and sheep. Thrives well on clay. Sow 30 to 40 lbs. per acre. . . . . Per lb., 25c; 10 lbs., \$2.25.

## Creeping Bent (*Agrostis Canina*)

VALUABLE in mixture with other grasses for lawns, etc. Suitable also for moist localities. (12 lbs. per bushel.) Sow 30 to 40 lbs. per acre. Market Price.

## Crested Dogtail (*Cynosurus Crystatus*)

A N excellent grass for hard, dry soils; valuable for pastures and lawns, as it is very hardy, tender, nutritious and relished by all stock. (21 lbs. per bushel.) Sow, if alone, 30 to 35 lbs. per acre. Perennial. Height, 1 to 1½ feet. Per lb., 45c; 10 lbs., \$4.00.

## Fine-Leaved Sheep Fescue

(*Festuca Ovina Tenifolia*)

SIMILAR to the Sheep Fescue, except that the leaves are much finer. Sow, if alone, 40 lbs. per acre. (14 lbs. per bushel.) Perennial. Height varies from 8 to 24 inches. Write for prices.

# GRASS SEEDS—Continued

## Hard Fescue (*Festuca Duriuscula*)

**P**ERENNIAL. Height, 12 to 24 inches. Thrives well in dry situations. The herbage is decidedly tender, but the flower heads, when ripe, become hard. Sow, if alone, 30 to 35 lbs. per acre. (12 lbs. per bu.)  
Per lb., 45c; 10 lbs., \$4.00.

## Italian Rye Grass (*Lolium Italicum*)

**B**IENNIAL. Height, 18 to 30 inches. As it is not perennial, it is not adapted for permanent pastures, but for one or two years hay it is unsurpassed. Sow, if alone, 45 to 50 lbs. per acre. (18 lbs. per bushel.)  
Per lb., 25c; 10 lbs., \$2.00; 100 lbs., \$15.00.

## Red Fescue (*Festuca Rubra*)

**A**CREEPING-ROOTED species, forming a close and lasting turf and especially adapted for dry sandy soils. It resists extreme drought and thrives on poor soils; also valuable for shady places in lawns as well as for golf-courses. 40 lbs. to the acre. (24 lbs. per bushel.)  
Per lb., 45c; 10 lbs., \$4.00.

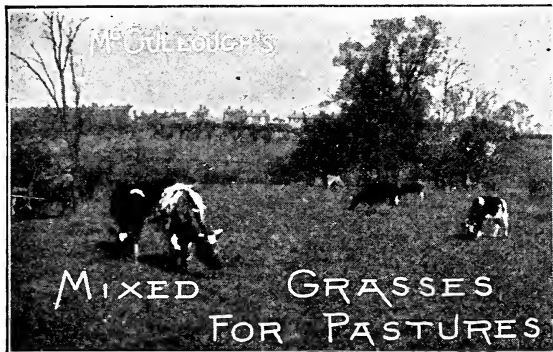
## Rhode Island Bent (*Agrostis Tenuis*)

A fine Grass, chiefly used for pastures and lawns, for which it is one of the best. (12 lbs. per bushel.) Sow 25 to 40 lbs. per acre. Write for prices.

## Sweet Vernal Grass

For a mixture with pasture Grasses it is valuable on account of its vernal growth, and also for continuing to throw up root foliage until late in the autumn. Its chief merit is its fragrant odor, which the leaves emit when partially dry, thus sweetening hay. Sow 3 to 5 lbs. per acre with other Grasses.

**True Perennial.** (*Anthoxanthum Odoratum*.) Market Price.  
**Annual.** (*Anthoxanthum Odoratum Puelli*.) Much smaller than the perennial. Price on application.



## Sheep Fescue (*Festuca Ovina*)

Perennial. Height varies from 6 to 20 inches. Grows naturally on light, dry, sandy soils. Sheep are very fond of it. (14 lbs. per bushel.) Sow 30 to 35 lbs., per acre. Write for prices.

## Tall Meadow Oat Grass (*Avena Elatior*)

A perennial. Has broad, flat leaves, and grows about 3 feet high; has an abundance of long, fibrous roots, penetrating deeply in the soil, enabling it to withstand drought and cold. Sow 25 to 30 lbs. per acre.  
Market Price.

## Timothy (*Phleum Pratense*)

Herd's Grass. Cat's-tail Grass. This Grass stands at the head for meadows. Never use less than a peck to the acre, then up to one-half bushel, as to circumstances. Market Price.

## Various Leaved Fescue

(*Festuca Heterophylla*)

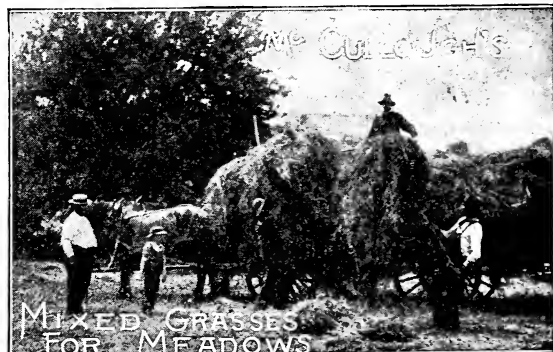
A very early hardy perennial, 2 to 3 feet high, thriving best in cold, moist soils. Yields heavily and is valuable in grass mixtures for permanent meadows. It grows very well in the shade, and is highly recommended for shaded lawns and woodland parks. 40 lbs. to the acre. Crop failed.

## Wood Meadow Grass (*Poa Nemoralis*)

No Grass is better adapted for pleasure grounds, particularly under trees, as it will not only grow in such places, but forms a fine sward where few other Grasses can exist. Sow 20 to 25 lbs. to the acre.

Per lb., 75c; 10 lbs., \$7.00.

**We specialize in Grass Seed of all kinds and for every purpose. For larger quantities—write for Special Prices.**



## McCULLOUGH'S MIXED GRASSES For Meadows and Pastures

**A**FTER years of experimenting we have aided largely in establishing the fact that a thicker and more prolonged growth is produced by a mixture of several varieties than when only one or two are used. There are always certain Grasses that are especially adapted to certain kinds of soils, and these are so carefully combined in our mixtures that in our **Mixture for Permanent Pastures**, grasses will be found that mature at intervals during the season, thereby insuring continuous pasturage, while our **Mixture for Permanent Meadow** will furnish excellent hay as well as late pasturage.

We are prepared to furnish seeds adapted to all soils and all situations, and for all purposes, composed of Grasses for light, medium or heavy soils; by light soil we mean that which is more or less of a sandy or gravelly nature; the heavy, clay and heavy loams; while the medium is an intermediate between these two. A light, wet soil, with respect to the Grasses suited to it, may be considered same as to the heavy soils, and a dry, heavy soil, more as to light soils.

Our best mixture is made entirely with our choice re-cleaned seeds, while in our second quality we use the same seeds, but without re-cleaning, and will be equal to the qualities usually to be had on the market. Our mixtures will all have a uniform weight of 16 pounds to the bushel. Quantity to be used per acre, one and one-half to two bushels, and half this quantity for renovating. In ordering, always state the soil and position on which you wish to use it.

## First Quality Mixtures

### For Meadows

Per lb., 35c; 8 lbs., \$2.40; bu. of 16 lbs., \$4.50.

### For Permanent Pasture

Per lb., 35c; 8 lbs., \$2.40; bu. of 16 lbs., \$4.50.

### For Pasture and Hay in Orchard and Other Shady Places

Per lb., 35c; 8 lbs., \$2.40; bu. of 16 lbs., \$4.50.

### For Marshy Grounds

Per lb., 35c; 8 lbs., \$2.40; bu. of 16 lbs., \$4.50.

### For Sandy and Rocky Grounds

Per lb., 35c; 8 lbs., \$2.40; bu. of 16 lbs., \$4.50.

Postage must be added if wanted by mail. See Postal Rates, second page of cover.

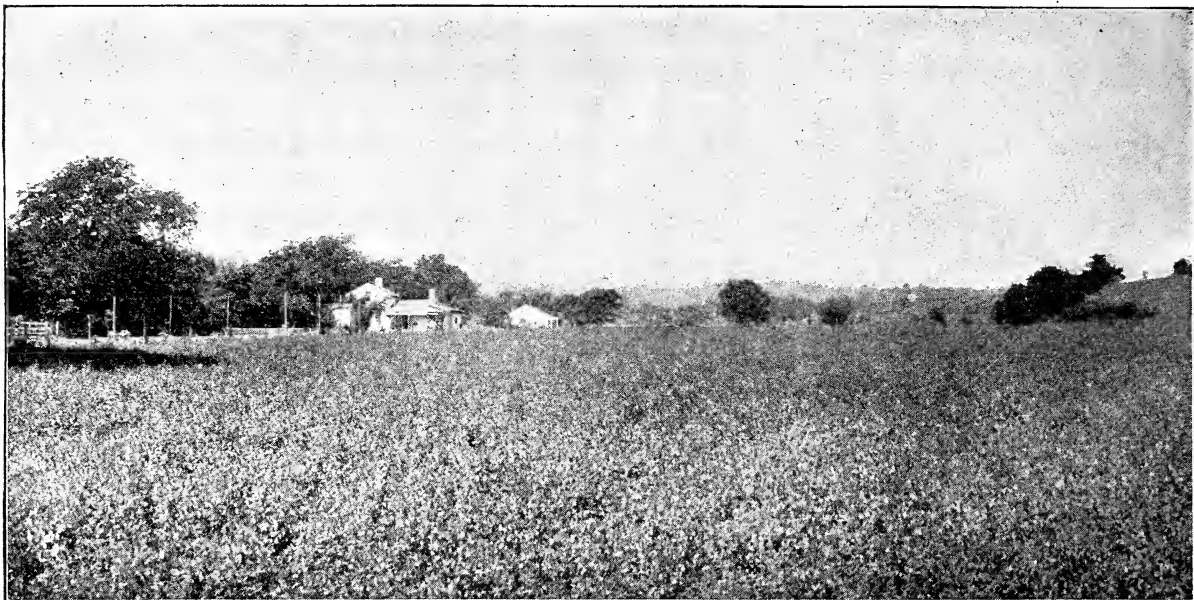
**We supply SECOND QUALITY MIXTURES of any of the above at a reduction of 25c per bushel.**

**We specialize in Grass Seed of all kinds and for every purpose.**

**For larger quantities—write for special prices.**

# McCullough's High-Grade Clover Seed

Where prices are given on Field Seeds they only represent market values at time of going to press. Purchasers of large quantities should write for latest prices. Grain bags, holding two bushels, 65c each, extra. Postage must be added if wanted by mail.



View of a Field of Alfalfa Clover grown in territory contiguous to Cincinnati

## Alfalfa, or Lucerne (*Medicago Sativa*)

**A**LFALFA is one of the most profitable crops the dairyman or stock farmer can raise, due to the high yield of palatable hay which contains a large percentage of protein. Alfalfa as grown in the United States yields more than twice the digestible nutriment that Red Clover does and more than three times the digestible protein to the acre. Alfalfa and corn make a perfectly balanced ration. Many farmers are using it in their rotation to take the place of Red Clover. This practice is satisfactory where the soil contains a large supply of lime and organic matter and the seed has been inoculated, or the land has been in Alfalfa previously.

Alfalfa is best adapted to steep limestone hillsides and gravelly river bottoms, where the water can get away from the roots. Will grow on acid soils providing the water is drained off and sufficient lime is added to correct the acidity.

## Seeding Alfalfa

The ground should be plowed in late fall and worked in spring once or twice to kill the weeds. If the land is acid it should be limed at the rate of three tons ground limestone to the acre. With a Wheat drill sow 20 to 25 lbs. of best grade non-irrigated inoculated Alfalfa seed with one bushel of 60 day Oats as a nurse crop to the acre any time between April 15th and May 10th. Apply 400 lbs. of a good high grade fertilizer, carrying a small per cent of ammonia and high per cent of phosphorus to the acre. If land is to be seeded following early potatoes, work ground up with disc and drag down. Sow seed the same as in spring, omitting the Oats as a nurse crop. Where land is being seeded to Alfalfa for the first time it will pay to inoculate the seed with Edwards' Legume Bacteria for Alfalfa. The bacteria will be present and if there is not enough available nitrogen present they will gather the nitrogen from the air and supply your young plants, thus insuring a good stand.

We offer **American grown seed** raised in the Northwest and West on non-irrigated land. It is free as possible from noxious weeds. (60 lbs. per bushel.)

Prices on application.

## Montana Alfalfa

A hardy variety from the non-irrigated or dry lands of eastern Montana, where the climate is severe. Under ordinary conditions the seed will serve all purposes where hardness is required and we advise giving the "Montana" a trial wherever it has been difficult to grow other varieties. Sow in spring or fall at the rate of 15 to 20 lbs. per acre. We have secured a supply of strictly high quality seed.

Per lb., 60c; 10 lbs., \$5.50; 100 lbs., \$50.00.

## Grimm Alfalfa

This variety of Alfalfa is being raised all over the United States. It seems to be much hardier than common Alfalfa, which is due to the division of its root system, enabling it to withstand freezing and thawing weather, droughts and other hardships which the common alfalfa will not endure.

We have this season secured a supply of **Genuine Seed** of this variety, grown by specialists in northern Idaho, where the soil and climatic conditions are most favorable for its development, consequently there can be no comparison between the quality of the seed offered by us and that offered from other sources of supply. When comparing prices kindly bear this fact in mind.

To secure a stand the following requirements are essential—good seed bed, limestone soil, or addition of 3 tons of fine ground limestone per acre, inoculation of seed, and plenty of available plant food. Sow in the spring or fall of year at the rate of 15 to 20 lbs. per acre

Per lb., \$1.00; 10 lbs., \$9.00.

## Crimson, or Scarlet Clover

(*Trifolium Incarnatum*)

Crimson, Scarlet or Carnation Clover

**T**HIS Clover is grown in Italy, France, Great Britain and other European countries. Was introduced into this country in 1822 and has proved especially adapted to the light sandy soils of the Eastern and Southern parts of the United States. Largely used as a cover crop in orchards.

If seeded in August it makes an early growth in the autumn, passes the winter in a somewhat dormant but green state, makes a very early spring growth and matures its seed and dies before summer. It makes little or no growth in very hot weather.

Crimson Clover should be seeded shallow on a moist, reasonably fertile, well drained, well settled seed bed. Inoculation is essential when seeding the first time.

Crimson Clover makes a good cover crop to be sowed on potato fields after the potatoes are dug. It makes a good growth in the fall and early spring and may be plowed under for potatoes the following spring.

It may be seeded alone following any farm crop which can be removed from the land by early summer, so that seed can be sown in late summer or very early fall. It may also be seeded for hay in mixture with grain, such as Wheat, Rye, Barley or Winter Oats, which are ready to cut for hay at about the same time as the Clover the following spring.

Apply seed at the rate of 12 to 14 lbs. per acre.

Per lb., 25c; 10 lbs., \$2.00

Price on cheaper grades given on application. For larger quantities—write for special prices.



# McCULLOUGH'S HIGH-GRADE CLOVER SEEDS—Continued

## Bokhara or Sweet Clover

**SWEET** Clover is a biennial plant, which closely resembles Alfalfa. It requires practically the same soil treatment as Alfalfa, but will grow under a wider variation of soil conditions than Alfalfa.

Three things are essential—lime, inoculation and scarified seed. If the land has raised Alfalfa previously, then the addition of lime may not be necessary. Inoculation with Edwards' Legume Bacteria tends to insure a stand, by securing nitrogen for the young plant at a time when it needs it the most. Scarified seed is seed that has been so treated as to scratch or crack the hard coating and make it easy for moisture to penetrate and hasten germination, thus insuring a stand.

When Sweet Clover is inoculated it gathers nitrogen from the air and stores it up in the soil for the use of future crops.

**Yellow Flowered.** (*Melilotus Officinalis*.) Is a biennial producing seed the second year and will reseed itself if left undisturbed. It is the variety which is best adapted for hay, as it blossoms three weeks earlier than the White Sweet Clover, has a finer stem and does not grow so tall. It makes excellent pasture where 10 to 15 lbs. of seed is mixed with 6 lbs. of Timothy sowed in Wheat or Rye, then pastured in the fall. The following spring the Sweet Clover will be three weeks earlier than any other grass, thus making a fine early pasture.

When sowing unhulled seed in the fall with Wheat for hay, apply 10 to 15 lbs. per acre. Do not sow unhulled seed in the spring and expect results the same year.

**Yellow Flowered, Unhulled Seed.**.....Per lb., 30c; 10 lbs., \$2.75.

**Yellow Flowered, Hulled Seed, Scarified.** Per lb., 42c; 10 lbs., \$3.75.

**White Flowered.** (*Melilotus Alba*.) Is a biennial producing seed the second year and will reseed itself if left undisturbed.

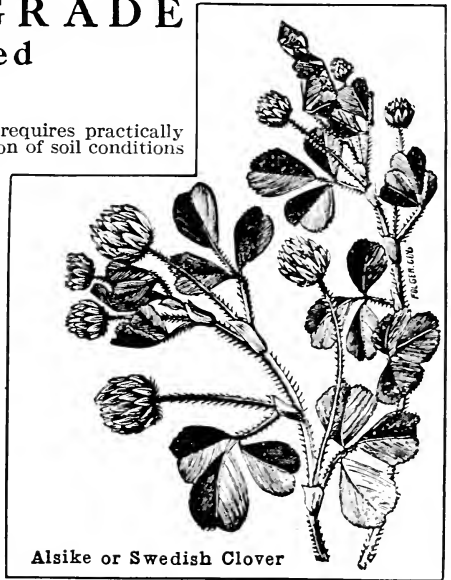
The White Sweet Clover is much coarser than the yellow, and is especially well adapted for soiling purposes. Many farmers are taking advantage of this crop in the bottoms where annual flooding prevents the use of Red Clover in a crop rotation, corn being planted year after year with an occasional crop of wheat. Scarified seed which has been inoculated is sown at the rate of 15 lbs. per acre in the corn at the last cultivation. This makes a growth of 10 to 15 inches by the time the corn is husked off of the stalk in the fall, and is plowed under late the following spring for corn.

It is being widely used where farmers wish to shorten their crop rotation and secure a crop of hay. To do this sow scarified seed which has been inoculated with Edwards' Legume Bacteria in the Wheat, from the middle of April to the 1st of May, at the rate of 15 lbs. per acre. The following September as much as one ton of hay per acre may be cut from this land and the next May the second growth may be turned under for corn. The Sweet Clover, being young and tender, rots early and forms a mulch which holds the water, thus making ideal conditions for a good corn crop. Mr. R. E. Simonds, of Miamitown, Ohio, won the Ohio State Championship in the 10 acre corn growing contest in 1917 with a yield of 102 bushels of corn per acre by practicing this method. Farmers can increase their yield of corn from one-third to one-half by using Sweet Clover as a green manure crop.

**White Flowered, Unhulled Seed.** Per lb., 30c; 10 lbs., \$2.75.

**White Flowered, Hulled Seed, Scarified.**  
Per lb., 45c; 10 lbs., \$4.00

**Unhulled Seed** of both varieties is very slow to germinate. Unhulled Seed (30 lbs. per bushel.) Hulled Seed (60 lbs. per bushel.)



Alsike or Swedish Clover

## Alsike or Swedish Clover (*Trifolium Hybridum*)

This variety is perennial and on account of its fibrous root system does not winter-kill. Will grow well on poor soil, and will do better on moist land than any other variety of Clover. It is a valuable acquisition to the forage plants of this country and is highly esteemed as pasturage for bees. Sow 6 to 8 lbs. per acre. Market Price.

## White or Dutch Clover (*Trifolium Repens*)

**T**HIS variety thrives on nearly all soils; is a low close-growing Clover and on account of its earliness and hardness should be used in mixtures for permanent pastures. Is very hardy, spreads rapidly, acts as a binder, and when mixed with other grasses for lawn purposes is very desirable. Is also excellent for bee food. Sow 6 to 8 lbs. per acre.....Per lb., 80c; 10 lbs., \$7.00.

## Red Clover—Medium

(*Trifolium Pratense*)

**S**OW 10 to 12 pounds to the acre, according to quality of seed used and condition of the soil. In ordering, always state quality desired, otherwise will send the best. Market Price.

## Japan Clover (*Lespedeza Striata*)

**T**HIS Clover is especially adapted for the South because it occupies the same position in pasture mixtures for the South that White Clover does in the North. Will thrive on poor land, and as it grows thickly soon furnishes abundant pasturage. Good stands have been secured by simply sowing the seed broadcast during March, April or May at the rate of 10 to 12 lbs. per acre. This Clover is a half-hardy annual without any objectionable root system. Sow 15 to 20 lbs. per acre. (25 lbs. per bushel.)

Per lb., 45c; 10 lbs., \$4.00.

## Red Clover—Sapling or Mammoth

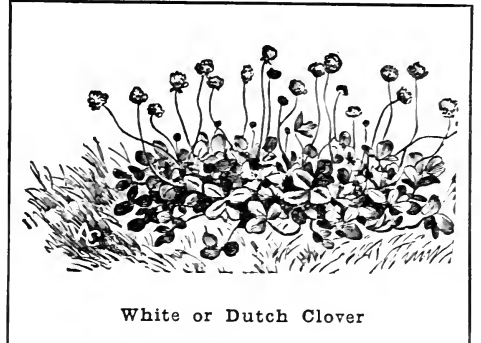
(*Trifolium Pratense Perenne*)

Also called **English Clover**, **Cow Grass**, **Perennial Red Clover**. Sow 10 to 12 lbs. per acre. Market Price.

**NOTE:**—We have installed scarifying machinery and our Hulled Sweet Clover is all scarified, which increases the germination 40 to 50 per cent.



SWEET CLOVER



White or Dutch Clover

# MISCELLANEOUS FARM SEEDS

The prices quoted are subject to market fluctuations. When customers are in need of large quantities, we will be pleased to submit samples and quote, on application, the lowest prices that the market will justify at the time. Please state quantities wanted when writing for prices.

## SOWING RAPE

**A** FORAGE plant of highest value. It can be sown in April for an early crop, and for fall crop in July, August and September, and still later further South. In a few weeks from the time of sowing, sheep, hogs or cattle can be turned on it. Under favorable conditions Rape is ready for pasturing sheep or cattle within six weeks from time of sowing, and on an average one acre will carry 12 to 15 sheep six weeks to two months. When on the Rape they should at all times have access to salt. Pigs and cattle are also very fond of it. Rape has a high feeding value. It is excellent for fattening sheep and swine, produces an abundant flow of milk in cows, and is the ideal pasture for weaning lambs. Its value as sheep pasture has been demonstrated in every State in the Union, and it is recommended by authorities everywhere as of superior value for hogs, furnishing the finest pasturage, or can be fed after cutting. Rape has strong-growing roots which penetrate the ground for a considerable depth. A rich, loamy soil is preferable, but it does well on sandy or stiff clays, and is excellent for sowing after a crop of wheat has been taken off, or when corn has been worked the last time. The plant is a rank grower and should have heavy manuring. Sow the seed by the end of June and the crop can be ready to feed at a season when it is most needed. It does well sown with oats. After oats are cut, the Rape grows rapidly. If the soil is rich and clean, sow broadcast; if not so clean, sow in drills and cultivate as for corn. When sown broadcast, use five to six pounds, and if in drills, two to three pounds to the acre. . . . . Per lb., 20c; 10 lbs., \$1.75.



Postage Must Be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.

## VETCHES OR TARES

**T**HIS has been used in Europe for many years as a stock food and green manuring or cover crop. It does best if sown with rye, the latter gives it support and thus ensures enormous crops. It makes an ideal hay and it is a pity that every American farmer does not use it. It fertilizes the ground without further trouble or cost, on account of the free nitrogen it gathers from the air. It produces a peculiar vine plant with very narrow foliage and elongated flowers of pinkish white in clusters. The height when supported is frequently 4 feet.

**Sand, Hairy, or Winter Vetch.** (*Vicia Villosa*.) Our stock of this is the true type, which will absolutely live throughout the winter, and buyers should beware when buying that they procure the right article, which is a small, round, black seed; this is far superior to Crimson Clover, as it never winter-kills. Sow from August 1st to October 1st, broadcast, 1 to 1½ bushels per acre, to which we suggest adding half a bushel of winter rye or wheat. In the Spring it can be plowed in as green manure, or when in flower cut for hay. All stock relish it keenly. (60 lbs. per bushel.) Short Crop—Market Price.

## SPELTZ OR EMMER

**T**HIS grain resembles wheat but is a much larger yielder, producing frequently as high as 80 bushels of grain per acre, and that on the poorest land. The hay, if cut green is desirable for horse or cattle feed, while the straw after thrashing, is equal to the best wheat straw. The heads are somewhat similar to two-rowed barley. For fattening cattle, poultry, horses, sheep, pigs, etc., it is claimed to be ahead of any other grains. Cultivation similar to wheat or oats. Sow at the rate of 50 to 60 lbs. per acre. Market Price.

### Barley

Sow 1½ to 2 bushels if drilled; 2 to 2½ bushels broadcast. Market Price.

### Choice Seed Oats

Broadcast 2 to 3 bushels to the acre.

**Winter Turi.** Perfectly hardy in the Southern and Middle States. Yields on good land, from 50 to 70 bushels to the acre of fine, heavy grain, weighing from 35 to 50 pounds to the measured bushel. Market Price. White, Black and Mixed. Market Price.

## SEED WHEAT AND SEED RYE

We are this season offering the following varieties of Seed Wheat. For detailed descriptions and cultural directions send for our special circular

### Poole Wheat

Is a bald smooth head, color of grain and chaff red, average height of plants 44 inches, straw stiff and stands up well on practically all kinds of soil. It is one of the best milling and baking wheats raised. It ripens in Southern Ohio average seasons about the 30th of June. Seed at the rate of two bushels per acre.

### Portage Wheat

Is a pure line selection from the Poole. It has a smooth head, red chaff, and red kernel. It has given the highest yield at an average of 8 years of 28 varieties tested at the Ohio Experiment Station. Ripens in Southern Ohio about the 1st of July. Seed at the rate of two bushels per acre.

### Fultz Wheat

Is a bald smooth wheat, red grain, white chaff, average height, 43 inches. Straw stiff and stands up well. It is well adapted to a wide variety of soil conditions and especially well adapted to level black land. Ripens in Southern Ohio average years, June 29th. Seed at the rate of two bushels per acre.

### Gladden Wheat

Is a pure line selection of the Gypsy wheat. It has a bearded head, smooth, grain red, chaff white. Stands up well and produces a good crop of straw. Is a vigorous grower and stands the freezing and thawing of the soils of Southern Ohio and does well on clay soils. Seed at the rate of 6 to 8 pecks per acre.

### Rosen Rye

This variety often produces as high as forty to forty-five bushels per acre, while 20 bushels per acre is a low yield. The average yield for common Rye is 15 bushels per acre.

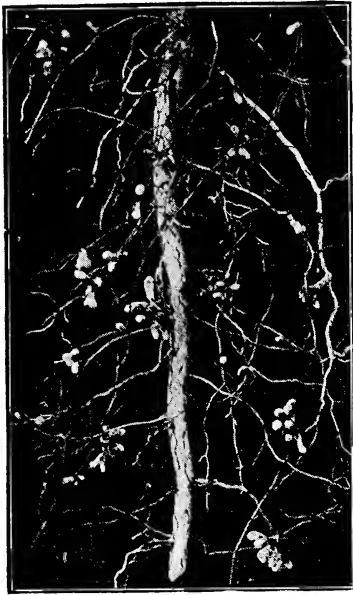
Rosen Rye produces a strong, vigorous straw; the grain is large, plump, heavy and of good color. Owing to its vigorous stooling property, less seed is required, three to four pecks per acre proving sufficient.

Write for special prices on Seed Wheat, Seed Rye and Hairy Vetch.

# INCREASE YOUR YIELD OF ALFALFA, CLOVERS, VETCH, COW PEAS, SOY BEANS

and other Legumes by inoculating your seed with

## Edwards' Legume Bacteria



Portion of root of alfalfa plant showing the tubercles or nodules formed by the nitrogen gathering legume bacteria. (Photograph natural size.)

All the requirements for successful inoculation are met in the cultures of EDWARDS' LEGUME BACTERIA. These cultures are manufactured by the method originated and successfully followed for ten years at the Ontario Agricultural College and the stock cultures were secured from the Bacteriological Laboratory of that institution. There can, therefore, be no question as to their efficiency. They are prepared under the personal supervision of S. F. Edwards, formerly instructor in Bacteriology at the Michigan Agricultural College, Instructor in Bacteriology in the College of Medicine at the University of Michigan, and for nine and one-half years Professor of Bacteriology at the Ontario Agricultural College. The cultures are made according to the best principles of the science of Bacteriology, and especial attention is given to keeping up the vigor and nitrogen-gathering power of the bacteria.

Cultures are made and kept in stock for legume crops as follows: Alfalfa, Sweet Clover, Red Clover, Alsike Clover, Crimson Clover, White Dutch Clover, Field or Garden Beans, Lima Beans, Soja Beans, Field or Garden Peas, Sweet Peas, Vetches, Cowpeas. Of this list the same culture can be used for either Alfalfa or Sweet Clover, and likewise, the same culture can be used for Red, Alsike, Crimson and Dutch Clovers. All the other crops require a different culture for each as named. The entire culture may be used on less than the amount of seed for which it is made without harm to the seed. The cultures are good for six months after leaving the laboratory. The cultures are sent by mail or express prepaid, with full directions for use.

EDWARDS' LEGUME BACTERIA cultures are made in three sizes:

To inoculate 30 pounds of seed..... \$6.60

To inoculate 60 pounds of seed..... 1.20

To inoculate 300 pounds of seed..... 5.00

Trial package for Beans, Garden Peas and Sweet Peas, 30 cents each.

Directions for use on each package.

In ordering, be sure to name crop to be inoculated.

These prices mean a very low cost per acre, the exact amount depending on the amount of seed sown. The cost is less than to pay freight rates on soil from a distance, or even to haul it from a neighbor's field for soil inoculation, and the labor is much less, as seed for several acres can be inoculated in a few minutes with the pure cultures.

## McCullough's High Grade Fertilizers

All Fertilizers Delivered Free on Board Cincinnati. Prices Subject to Change Without Notice.

### SHEEP MANURE—Pulverized

THIS is a natural manure; excellent for mixing with the soil. Especially valuable for lawns, contains all the constituents for promoting a quick, luxuriant growth and a rich, green color. Use at the rate of from 500 to 600 pounds per acre. For pot plants, mix one part of sheep manure to six parts of soil. For use in the vegetable garden, spread over the surface and dig in. Being soluble, it readily makes a safe liquid manure—one pound to five gallons of water can be used. 1 lb. carton, 10c; 5 lbs., 25c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.50; 100 lbs., \$2.75.

### PURE BONE MEAL

THIS is excellent for rose culture and lawns. It decomposes rapidly and is quickly effective. Should be applied at the rate of 400 to 500 lbs. per acre. Analysis: Ammonia, 2%; total phos. acid, 27%. 1 lb., 10c; 5 lbs., 35c; 10 lbs., 60c; 25 lbs., \$1.25; 50 lbs., \$2.25; per bag of 125 lbs., \$4.25.

### EVER GREEN LAWN LIME

#### THE GRASS AND GARDEN TONIC

THIS lime is essentially a plant food, useful for correcting acid soils, also for binding sandy soils and loosening clay soils. Should be applied at the rate of 1,000 to 2,000 lbs. per acre for sandy soils and 2,000 to 3,000 lbs. per acre for clay soils, a few weeks before applying Commercial Fertilizers. Bag of 50 lbs., \$1.00; 2 bags (100 lbs.), \$1.75; 5 bags (250 lbs.), \$4.50; 10 bags (500 lbs.), \$8.50.

### ZENKE'S NEW PLANT LIFE

(Liquid)

It is a Plant Food containing in proper percentage All Elements essential to Plant Growth.

Mix one quart with 50 gallons of water and water plants sufficiently to saturate soil. Use about one quart to one square foot of soil.

It is immediately available to absorption by plants and saves time and labor. 8 oz. can, 25c; gallon, \$3.25. (One gallon is sufficient to make 200 gallons of solution.)

### EXCELSIOR PLANT FOOD

For Ferns and Other House Plants

AN odorless preparation, combining in a concentrated and soluble form every element required in plants and flowers to produce vigorous growth and a profusion of flowers. It is immediately soluble in water, and available to plant life from the moment of application. Small package, 10c; medium size package, 20c; large package, 35c.

### NITRATE OF SODA

CONTAINS about 16% nitrogen, equal to 20% ammonia. We recommend it as the cheapest and best form in which to apply nitrogen to plants. 1 lb., 15c; 2 lbs., 25c; 10 lbs., \$1.10; 25 lbs., \$2.00; 100 lbs., \$7.00.

### HALF AND HALF

IS especially valuable for Field Crops, Potatoes and Grain. Should be applied at the rate of 400 to 500 lbs. per acre. Analysis: Ammonia, 2%; total phos. acid, 16%; potash K<sup>2</sup>O, 1%. 5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.10; 50 lbs., \$2.00; per bag of 125 lbs., \$3.75.

### ACID PHOSPHATE 16%

SOME soils contain a large percentage of Nitrogen and some Potash, but still are deficient in Phosphoric Acid. This must be supplied by the application of 16% Acid Phosphate. Apply from 200 to 400 lbs. per acre. Analysis: Available phos. acid, 16%; insoluble, 1%. 5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.75; per bag of 125 lbs., \$3.00.

### DRIED BLOOD MEAL

THIS is a splendid fertilizer for roses, carnations, chrysanthemums, etc., as well as for pot plants. 1 lb., 20c; 2 lbs., 35c; 25 lbs., \$3.15; 50 lbs., \$5.95; 100 lbs., \$11.10.

### LAND PLASTER

IF applied as a top dressing for grass or clover crops in the Spring, it greatly increases the growth and yield of same. 100 lb. bag..... \$1.50

### HYDRATED LIME

3 lb. package, 10c; per bag of 50 lbs., \$1.00.

### SULPHATE OF AMMONIA

CONTAINS approximately 25% of ammonia and comes in fine crystals which is very nice to apply broadcast. Owing to its firmness and keeping qualities it is preferred by some gardeners and fruit growers to Nitrate of Soda. Owing to the fact that it carries 5% more ammonia to the weight than Nitrate of Soda, the user should apply four pounds of Sulphate of Ammonia where he uses 5 lbs. of Nitrate of Soda. 1 lb., 15c; 2 lbs., 25c; 10 lbs., \$1.15; 25 lbs., \$2.65; 100 lbs., \$9.00.

# Hardy Herbaceous Perennial Plants

## FOR FALL PLANTING

THE steadily increasing demand for hardy plants has induced us to give them more attention and to increase our stock considerably. For such of our customers who are not acquainted with the different varieties, we shall be pleased to make suitable selections of the most desirable species, that once planted, with very little care, will keep the garden gay with flowers from the time frost leaves the ground until late in Autumn.

Cannot accept orders for Hardy Perennial Plants totaling less than one dollar.

### ACHILLEA (Sneezewort)

**Boule De Neige.** (Ball of Snow.) An improved variety, bearing pure white flowers of perfect form all Summer. Fine for cut flowers. . . . . Each, 20c; per dozen, \$2.00.

**Eupatorium.** (Parker's variety.) Produces brilliant yellow heads of flowers all Summer, with neat, finely-cut foliage. . . . . Each, 25c; per dozen, \$2.50.

**Tomentosa.** (Woolly Yarrow.) Handsome cut foliage and bright yellow flowers in a multitude of flat heads during June; height about 12 inches. . . . . Each, 25c; per dozen, \$2.50.

### AGROSTEMMA (Rose Campion)

Erect growing plants with silvery foliage and showy flowers during June and July.

**Coronaria.** (Mullein Pink.) Bright rosy-crimson flowers; 2 1/2 to 3 feet. . . . . Each, 20c; per dozen, \$2.00.

### AJUGA (Bugle)

**Reptans Rubra.** A fine plant for the rockery and for shady situations. Large spikes of purplish-blue flowers in May. . . . . Each, 25c; per dozen, \$2.50.

### ALYSSUM (Madwort)

**Saxatile Compactum.** (Basket of Gold, Gold Tuft, Rockmadwort.) A fine plant for the rockery or border, grows 1 foot high and produces broad flat heads of yellow flowers in May. . . . . Each, 20c; per dozen, \$2.00.

### ANCHUSA ITALICA

**Dropmore Variety.** Remarkable for its free and continual flowering all Summer and the beautiful gentian-blue of its flowers; grows about five feet high. . . . . Each, 20c; per dozen, \$2.00.

**Myosotidiflora.** Grows 10 to 12 inches high, producing during April and May sprays of beautiful Forget-Me-Not-like flowers of rich blue. . . . . Each, 35c; per dozen, \$3.50.

### ANTHEMIS TINCTORIA

The hardy Marguerites are among the most satisfactory summer-flowering perennials, growing about 15 inches. Large golden yellow flowers. . . . . Each, 20c; per dozen, \$2.00.

### AQUILEGIA (Columbine)

**CHARMING** hardy plants, with distinct clear-cut foliage, bearing in countless numbers through May and June exquisite clear blue, white, rose, yellow, purple and striped blossoms. They thrive well with ordinary garden culture, but do best in partially shaded nooks.

**Chrysantha.** (Golden Columbine.) Golden yellow flowers with long spurs. . . . . Each, 20c; per dozen, \$2.00.

**Chrysantha Alba.** A long spurred white variety. . . . . Each, 20c; per dozen, \$2.00.

**Coerulea.** Flowers often three inches in diameter; the outer sepals deep lilac or blue, petals white, the deep blue spur tipped green. . . . . Each, 20c; per dozen, \$2.00.

**Long Spurred Hybrids.** Beautiful variations from the standard type. . . . . Each, 20c; per dozen, \$2.00.

**Canadensis.** (American Columbine.) A bright red and yellow variety, very attractive. . . . . Each, 20c; per dozen, \$2.00.

### ARABIS (Rock Cross)

**Alpina.** A desirable early Spring flowering plant, adapted for edging and the rock garden, but does equally well in the border, forming a dense carpet, completely covered with pure white flowers, which last a long time in bloom. . . . . Each, 25c; per dozen, \$2.50.

**Alpina Flore Pleno.** A distinct double white flowering form of the above. . . . . Each, 25c; per dozen, \$2.50.



### ASCLEPIAS (Butterfly Weed)

Showy native plants about 2 1/2 feet high, blooming during July and August.

**Incarnata Rosea.** (Swamp Milkweed.) Pretty rose-flesh colored flowers. . . . . Each, 20c; per dozen, \$2.00.

**Tuberosa.** Brilliant orange-colored flowers. . . . . Each, 20c; per dozen, \$2.00.

### ASTERS (Michaelmas Daisies or Starworts)

THESE are among the showiest of our late flowering hardy plants, giving a wealth of bloom at a season when most other hardy flowers are past, and for the best effect should be planted in masses of one color. The hardy sorts are entirely distinct from Annual Asters, being smaller in bloom but produced in greater quantity.

**Beauty of Colwall.** A grand semi-double flowering type of a beautiful lavender shade; height about four feet; September. . . . . Each, 25c; per dozen, \$2.50.

**Novi Belgii Climax.** The plant is of strong vigorous habit, over 5 feet high, with pyramidal shaped flower stems filled with light lavender-blue flowers, each 1 1/4 inches or more in diameter. August to October. . . . . Each, 25c; per dozen, \$2.50.

**Novi-Belgii, St. Egwin.** Handsome flowers of cherry pink. September and October. . . . . Each, 25c; per dozen, \$2.50.

**Novae-Angliae.** A tall growing species, bearing clear purple flowers; September. . . . . Each, 20c; per dozen, \$2.00.

**Novae-Angliae Roseus.** Similar to the preceding, bearing rose-colored flowers. September. . . . . Each, 20c; per dozen, \$2.00.

**Novae-Angliae.** Mrs. F. W. Raynor. Large, deep, crimson. September. . . . . Each, 20c; per dozen, \$2.00.

**Ptarmicoides.** White flowers, produced in great masses, fine for cutting. July and August. . . . . Each, 25c; per dozen, \$2.50.

**Snowflake.** Grows to nearly two feet. Flowers pure white. September. . . . . Each, 20c; per dozen, \$2.00.

**Trinervis.** Plant grows three and one-half feet high and produces deep violet-mauve flowers from September to November. . . . . Each, 25c; per dozen, \$2.50.

### BAPTISIA (False Indigo)

**Australis.** Grows about 2 feet high with dark green, deeply-cut foliage and spikes of dark blue flowers in June. . . . . Each, 20c; per dozen, \$2.00.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

## HARDY HERBACEOUS PLANTS—Continued

### BOCCONIA (Plume Poppy)

**Cordata.** A splendid plant, growing sometimes six feet high, bearing panicles of creamy-white flowers in July and August; makes a grand effect as a center in a hardy bed or a border background.

Each, 20c; per dozen, \$2.00.

### BOLTONIA (False Chamomile)

**TALL** growing, showy plants, with flowers resembling hardy Asters; appearing in September.

**Asteroides.** Pure white; five to six feet....Each, 20c; per dozen, \$2.00.

**Latisquama.** Pink, tinted lavender, six feet...Each, 20c; per dozen, \$2.00.

### CAMPANULAS (Bell Flower)

**BELL-SHAPED** flowers, well known and easily grown, of much variety of form, some being tall and suitable for planting in borders or among shrubbery, while others are dwarf and suitable for edging, rockwork, etc.

**Carpatica.** (Carpathian Hare Bell.) Ideal for border or rockery planting, being about eight inches high; flowers from June till frost. Blue and white, each separate.....Each, 20c; per dozen, \$2.00.

**Glomerata Dahurica.** Large heads of purple flowers, fine for the border. 2 feet.....Each, 20c; per dozen, \$2.00.

**Persicifolia.** (Peach Bells.) Blue flowers during June and July; 2 feet. Each, 25c; per dozen, \$2.50.

**Rotundifolia.** (Scotch Hare Bells.) Very graceful drooping blue bells, rising from compact tuft of foliage; fine for rockery. June to August. Each, 20c; per dozen, \$2.00.

### CERASTIUM (Snow in Summer)

**Tomentosum.** Suitable for the rockery or for covering dry, sunny spots. Low growing plant with silvery foliage and white flowers in June.

Each, 20c; per dozen, \$2.00.

### CHELONE (Shell Flower)

**STATELY** plants growing about two feet high and bearing numerous spikes of large flower-heads during the Summer and Fall.

**Lyoni.** Showy, purplish-red flowers.....Each, 25c; per dozen, \$2.50.

### COREOPSIS

**Lanceolata Grandiflora.** A beautiful hardy border plant; grows eighteen inches high, and produces its bright golden yellow flowers in great profusion the entire season.....Each, 20c; per dozen, \$2.00.

**Rosea.** Small pink flowers, blooming in August and September. Foliage dark green, finely divided. Useful in border and rockery; 1 foot. Each, 25c; per dozen, \$2.50.

### DELPHINIUMS (Perennial Larkspur)

**THESE** are deservedly one of the most popular subjects in the hardy border, bold, attractive, and highly prepossessing plants of easiest culture; perfectly hardy. They will establish themselves in almost any garden soil, but respond quickly to liberal treatment. Will begin blooming about the middle of June. If stalks are cut off as soon as flowers fade, they will continue blooming all Summer. (See cut.)

**Belladonna Hybrids.** The freest and most continuous blooming of all. The clear turquoise-blue flowers are not surpassed by any; 3 feet. Each, 20c; per dozen, \$2.00.

**Belladonna Semi-plena.** Clear blue flowers, overlaid with pink. 3 feet.....Each, 25c; per dozen, \$2.50.

**Formosum.** Dark blue, white center, spikes three to four feet tall, vigorous; free blooming. 3 feet. Each, 20c; per dozen, \$2.00.

**Giant Hybrids.** Unquestionably the finest strain of mixed hybrids ever offered. The original stock came from Europe, and consisted of the best-named varieties. The plants are of strong, vigorous habit, with large flowers on spikes two feet and over long, the majority running in the lighter shades of blue. Each, 20c; per dozen, \$2.00.

**Chinensis.** A pretty dwarf species, with fine feathery foliage and intense gentian-blue flowers in open panicles.....Each, 25c; per dozen, \$2.50.

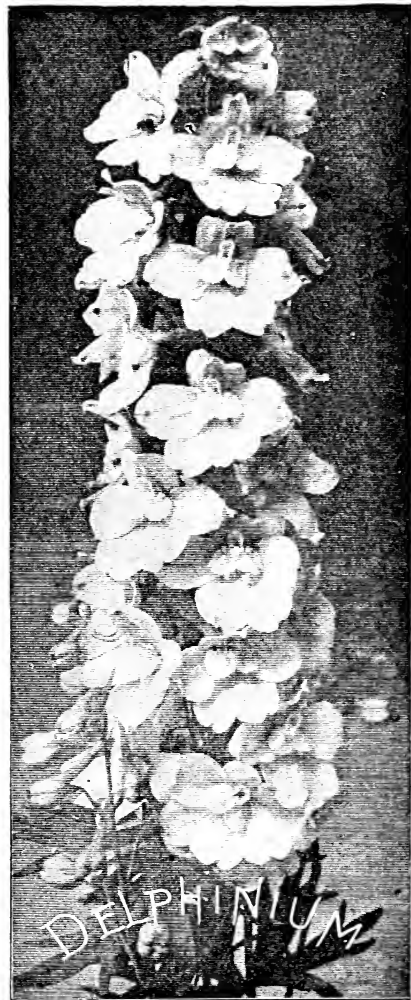
**Chinensis Alba.** A pure white form of the above. Each, 25c; per dozen, \$2.50.

### EUPATORIUM

**Ageratoides.** (Thorough Wort.) A border plant of strong, free growth, 3 to 3 1/2 feet high, with small white flowers in dense heads; splendid for cutting. August and September.....Each, 25c; per dozen, \$2.50.

**Coelestinum.** Light blue flowers, similar to the Ageratum, blooms from August until frost. Each, 25c; per dozen, \$2.50.

We do not guarantee or replace plants, shrubs or trees at prices quoted.



### EUPHORBIA (Milk Wort)

**Corollata.** (Flowering Spurge.) Grows about 18 inches high, bearing from June to August umbels of pure white flowers with a small green eye; desirable for cutting. Each, 25c; per dozen, \$2.50.

**Cyparissias.** Grows 10 to 12 inches high with Cypress-like foliage and bears showy trusses of bright yellow flower-like bracts during May; very effective even when out of bloom.....Each, 25c; per dozen, \$2.50.

### FUNKIA (Plantain Lily)

**THE** Plantain Lilies are among the easiest plants to manage; their broad, massive foliage makes them attractive subjects for the border, even when not in flower. They succeed equally well in sun or shade.

**Coerulea.** (Blue Day Lily.) Blue flowers and broad green leaves.....Each, 20c; per dozen, \$2.00.

**Glauc.** Purplish-white flowers with immense foliage. Each, 20c; per dozen, \$2.00.

**Subcordata Grandiflora Alba.** (White Day Lily, August Lily.) Pure white, lily-shaped, fragrant flowers. Each, 20c; per dozen, \$2.00.

**Thomas Hogg.** Leaves are larger than Subcordata Alba and variegated around edges, with lavender flowers. Each, 20c; per dozen, \$2.00.

**Undulata Variegata.** Foliage green, striped with white. Each, 20c; per dozen, \$2.00.



## HARDY HERBACEOUS PLANTS—Continued

### GAILLARDIA (Blanket Flower)

**Grandiflora.** Beginning to flower in June, they continue one mass of bloom the entire Summer. Flowers three inches in diameter; center dark reddish brown; petals orange to crimson. (See cut.) Each, 20c; per dozen, \$2.00.

### GYPSOPHILA (Baby's Breath)

**D**URING August and September the plant is a mass of delicate feathery blooms. These may be used as fresh cut flowers, also for a semi-everlasting effect.

**Paniculata.** Loose, feathery sprays of white flowers, making a mist-like effect; fine for bouquets. Each, 20c; per dozen, \$2.00.

**Repens.** An elegant trailing plant for the rockery, with clouds of small white flowers in July and August. Each, 25c; per dozen, \$2.50.

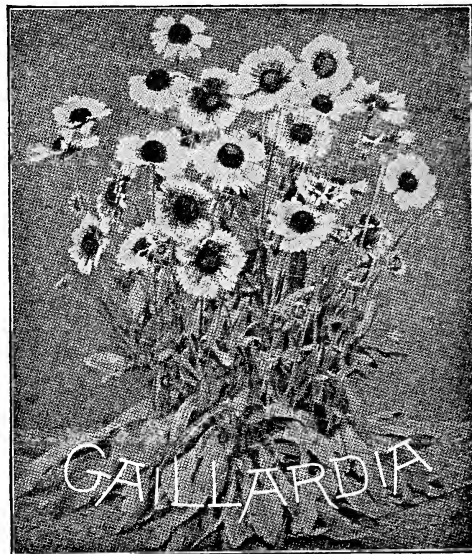
### HELIANTHUS (Hardy Sunflower)

**T**HE perennial Sunflower is very effective either in borders, among shrubbery, or as clumps on the lawn, etc. (See cut.)

**Maximiliana.** Flowers in long, graceful sprays during October, when all others have finished flowering; five to seven feet. Each, 20c; per dozen, \$2.00.

**Mollis.** Large, single lemon-yellow flowers, with downy white foliage; blooms in August and September; four feet. Each, 20c; per dozen, \$2.00.

**Sparsifolius.** A most gracefully formed single variety of large size, of a deep yellow color, on long stems; splendid for cutting; August to September; six to eight feet. Each, 20c; per dozen, \$2.00.



### HELENIUM (Sneezewort)

**T**HESE are desirable border plants, succeeding in any soil in a sunny location; useful for cutting.

**Autumnale Superbum.** Flowers are deeper yellow, separate and distinct from Riverton Beauty. Each, 20c; per dozen, \$2.00.

**Riverton Beauty.** Lemon-yellow, with large purplish-black cone. Each, 20c; per dozen, \$2.00.

**Riverton Gem.** Old gold changing to wall-flower red. Each, 25c; per dozen, \$2.00.

### HELIOPSIS (Orange Sunflower)

**Pitcheriana.** Very similar to a small sunflower, but blooming earlier; deep golden yellow; all Summer, June till frost; three feet high.

Each, 20c; per dozen, \$2.00.

**Scabra Zinniaeflora.** A new double flowering form of the Orange Sunflower, somewhat resembling a Zinnia in shape. Fine for cutting, July and August; two feet. Each, 25c; per dozen, \$2.50.

### HEMEROCALLIS (Yellow Day Lily)

Lily-like plants, which flower in greatest profusion during the Summer.

**Aurantiaca Major.** Grows two to three feet high and produces deep, orange-colored flowers during June and July. Each, 20c; per dozen, \$2.00.

**Flava.** The best known variety, very fragrant, deep lemon-yellow flowers in June and July. Each, 20c; per dozen, \$2.00.

**Luteola.** Blooms during July and August; flowers a pleasing shade of lemon-yellow. Each, 20c; per dozen, \$2.00.

**Sovereign.** Cup-shaped flowers; inside of petals light yellow, outside brown; blooms during July and August. Each, 20c; per dozen, \$2.00.

**Thunbergii.** Bears rich, buttercup-yellow, funnel-shaped flowers in July and August. Each, 20c; per dozen, \$2.00.

### HEUCHERA (Alum Root)

**F**OLIAGE remains close to the ground. During July and August, the graceful thin flower spikes, 2 feet high, appear in profusion.

**Sanguinea.** Bright scarlet. Each, 20c; per dozen, \$2.00.

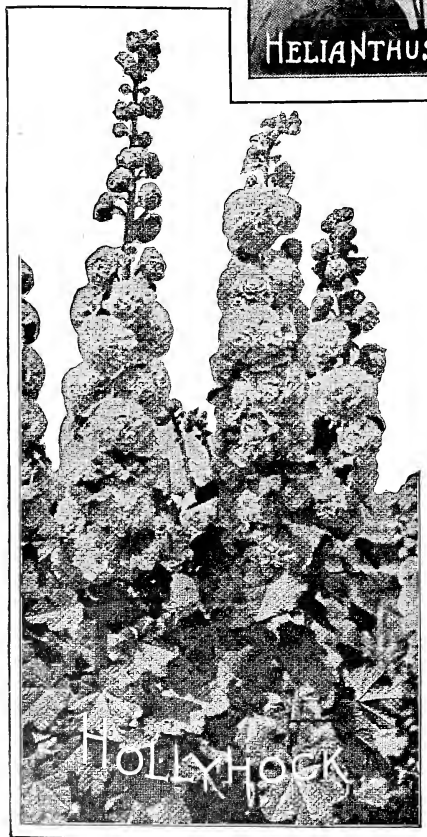
### HIBISCUS (Mallow)

**T**HESE are a mass of bloom during the entire Summer, when they produce large flowers in gorgeous colors.

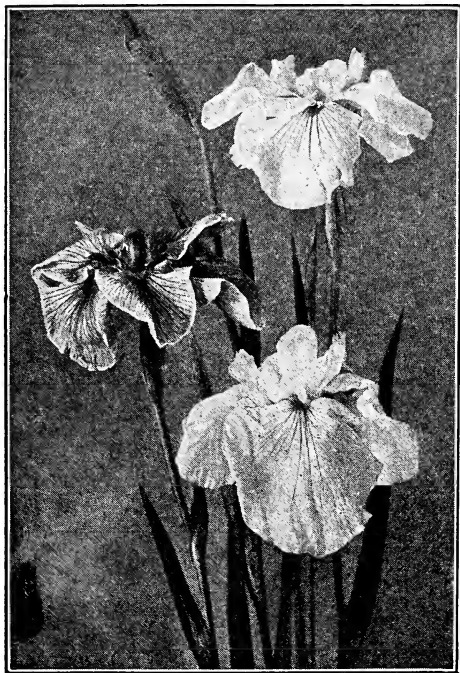
**Mallow Marvels, Giant-flowering.** Flowers of enormous size, frequently 10 to 12 inches in diameter. Plants grow from 5 to 8 feet high, and bloom from early in July until late in Autumn. We offer three distinct colors—red, pink and white—strong roots. One each of the 3 colors for \$1.00. Each, 35c; per dozen, \$3.50.

**Crimson Eye.** Blooms of purest white with deep crimson eye; flowering in July; 4 feet. Each, 20c; per dozen, \$2.00.

We do not guarantee or replace plants, shrubs or trees at prices quoted.



## HARDY HERBACEOUS PLANTS—Continued



Japanese Iris

## HOLLYHOCK

FOR planting in rows or groups on the lawn, or for interspersing among shrubbery, they are invaluable. They require rich, deep soil, well drained.

**Newport Pink.** Finest pure pink, double flowering variety. Each, 25c; per dozen, \$2.50.  
**Double White, Double Rose, Double Yellow, Double Red, Double Mixed.** Each, 20c; per dozen, \$2.00.  
**Single Red, Single Rose, Single Yellow, Single Mixed.** Each, 20c; per dozen, \$2.00.

## IBERIS (Hardy Candytuft)

**Sempervirens.** Low-growing, with evergreen foliage. In Spring and early Summer, is completely covered with dense heads of pure white flowers.

Each, 20c; per dozen, \$2.00.

## LIBERTY IRIS (Flag Iris)

The "Fleur-de-Lis" of France

THE Liberty Iris is one of the most desirable May flowering plants. The flowers are of large size and of exquisite colors. For the best results plant in well-drained sunny position, barely covering the roots. Avoid fresh manure in preparing your border.

**Baron von Humboldt.** Dark blue.  
**Canary Bird.** Light yellow or buff.  
**Coerulea.** Sky blue.  
**Florentina Alba.** White.  
**Florentina Coerulea.** Blue, very fine.  
**King of Yellows.** Yellow.  
**Mme. Chereau.** Pure white, border of blue.  
**Mont Blanc.** Pure white.  
**Purpurascens.** Dark purplish blue.  
**Queen Victoria.** Blue, changing to bluish white.  
**Thorbecke.** White and deep violet.

Price of above.....Each, 20c; per dozen, \$2.00.

If by mail, add 5c each, 50c per dozen.

We can furnish large clumps of most of the above varieties from 50c to \$1.00 each.

## IRIS PALLIDA DALMATICA

This variety is of strong, vigorous habit, growing in good soil 4 feet high, with exceptionally large, fragrant flowers, standards lavender, falls lavender, shaded blue; exquisite in every way and fine for massing.

Each, 25c; per dozen, \$2.50.

## IRIS SIBERICA

**Orientalis.** (Yale Blue.) A slender, graceful, tall-growing Iris, with flowers quite similar to those of the Liberty Iris, but smaller and much more numerous. The plants form large, strong, compact clumps, and bloom so freely that the deep blue flowers give almost a solid color effect.....Each, 20c; per dozen, \$2.00.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

## JAPANESE IRIS (Iris Kaempferi)

THEY are most effective when planted in groups, and thrive best in a moist soil. The flowers are of immense size, from six to eight inches in diameter, and of the most beautiful and delicate shades. They are perfectly hardy, flowering in great profusion during June and July. (See cut.) We offer the following list of named sorts:

**Azuma Yuki, No. 81.** Petals rosy purple with heavy white veins, standards brownish-red, striped with white, yellow star center.

**Banrai Nami, No. 1.** Petals pale pinkish white with white standards and yellow center.

**Furomon, No. 28.** Petals bright pink, shading to creamy white, with heavy purple veins, standards purple, yellow center.

**Kimino-Medmui, No. 97.** Soft lilac, with dark purple veins and purple standards.

**Krishi-Ikari, No. 85.** Petals brownish-red with light brown veins, center yellow, standards scarlet, striped with white.

**Kyo-Dai-Yama, No. 59.** Petals indigo, standards greenish blue, striped with white.

**Okino-Kamone, No. 65.** Petals recurved and creamy white, standards pure white.

**Sassa No Koe, No. 34.** Petals recurved and creamy white, veined pink and white, orange center, standards pure white, spotted deep pink.

**Yezo-Nishiki, No. 16.** Petals lavender, heavily spotted with dark purple, center yellow, standards lavender, bordered with purple.

**Yodo No Kuruma, No. 8.** Petals bright pink, shading to dark pink at center and heavily veined, standards purple, marbled with white.

**No. 66.** Purple flowers with white spots; earliest to bloom.

Above named varieties, each, 30c; per dozen, \$3.00.

By mail, each, 35c; per dozen, \$3.50.

**Finest Mixed (Our selection).** Each, 20c; per dozen, \$2.00.

By mail, each, 25c; per dozen, \$2.50.

We can furnish large clumps of most of the above varieties from \$1.00 to \$1.50 each.

## LIATRIS (Blazing Star, or Gay Feather)

MOST showy and attractive native plants, succeeding anywhere and producing their large spikes of flowers from July to September.

**Pycnostachya.** Spikes of light, rosy-purple flowers; five feet.....Each, 20c; per dozen, \$2.00.  
**Spicata.** Deep purple flowers, in spikes two to three feet high.....Each, 20c; per dozen, \$2.00.



Liberty Iris

## HARDY HERBACEOUS PLANTS—Continued

## LINUM (Flax)

**Perenne.** A fine plant for the border or rockery; grows 2 feet high, with light, graceful foliage and large blue flowers all summer....Each, 25c; per dozen, \$2.50.

## LUPINUS POLYPHYLLUS (Lupine)

**EFFECTIVE** plants, producing large spikes of flowers. Will thrive in any good garden soil; grow about three feet high and bloom latter part of May and early June.  
**Polyphyllus.** Clear blue...Each, 20c; per dozen, \$2.00.  
**Albus.** A white variety of above...Each, 25c; dozen, \$2.50.  
**Moerheimi.** Its clean, bold growth always attracts attention. The spikes of flowers are frequently over a foot long, in color superb, being a combination of light and dark shades of pink, without a trace of magenta.....Each, 25c; per dozen, \$2.50.

## LYCHNIS

**Arkwrighti.** Produces large circular flowers varying in color through crimson, scarlet, orange, salmon and intermediate shades; blooms all Summer and grows about 2½ feet high...Each, 50c; per dozen, \$5.00.  
**Chalcedonica.** A desirable plant, grows two to three feet high; flowers brilliant orange scarlet.  
 Each, 20c; per dozen, \$2.00.

**Viscaria Splendens.** (Catch Fly.) Is a brilliant border plant, the flowers being produced in dense spikes.  
 Each, 20c; per dozen, \$2.00.

## LYTHRUM

**Roseum Superbum.** (Rose Loose Strife.) A strong growing plant, three to four feet high, producing large spikes of rose colored flowers from July to September.  
 Each, 20c; per dozen, \$2.00.

## MERTENSIA (Blue Bells)

**Virginica.** An early spring-flowering plant, growing about one to one and one-half feet high, with drooping panicles of handsome, light blue flowers, fading to clear pink; one of the most interesting spring flowers, blooming in May and June...Each, 20c; per dozen, \$2.00.

## MONARDA (Bergamot)

**SHOWY** plants, growing from two to three feet high, succeeding in any soil or position, with aromatic foliage, producing their bright flowers during July and August.  
**Didyma.** (Oswego Tea.) Flowers bright scarlet.  
 Each, 20c; per dozen, \$2.00.

## MYOSOTIS (Forget-Me-Not)

**Palustris Semperflorens.** A variety that is hardly ever out of flower. Useful in a shady spot in the border.  
 Each, 20c; per dozen, \$2.00.  
**Alpestris Robusta Grandiflora.** The large spring-flowering Forget-Me-Not, with intense sky-blue flowers.  
 Each, 20c; per dozen, \$2.00.

## OENOTHERA (Evening Primrose)

**ELEGANT** subjects for growing in an exposed, sunny position, either in the border, or on the rockery, blooming all Summer.  
**Pilgrimi.** Large clusters of bright yellow flowers.  
 Each, 20c; per dozen, \$2.00.

## PENTSTEMON (Beard Tongue)

**Barbatus Torreyi.** Spikes of brilliant scarlet flowers from June to August. Grows 3 to 4 feet high.  
 Each, 25c; per dozen, \$2.50.

## PLATYCODON (Balloon Flower or Japanese Bell Flower)

**THE** Platycodons are closely allied to the Campanulas, and form neat, branched bushes of upright habit.  
**Grandiflorum.** Deep blue, cupped, star-shaped flowers, one and a half feet....Each, 20c; per dozen, \$2.00.  
**Album.** A white-flowered form of the above.  
 Each, 20c; per dozen, \$2.00.  
**Mariesi.** Deep blue, bell-shaped flowers, nearly three inches across on one-foot-high plants.  
 Each, 20c; per dozen, \$2.00.

## POLEMONIUM (Jacob's Ladder)

**Reptans.** Useful border plants, grows about 12 inches high, succeeds best in a partially shaded position; deep green, finely-cut foliage and spikes of showy blue flowers in May and June.....Each, 25c; per dozen, \$2.50.

## PHLOX DIVARICATA CANADENSIS

This variety is worthy of extensive planting, as it commences to bloom early in April and continues through May, with large, fragrant lavender flowers, on stems 10 inches high.....Each, 20c; per dozen, \$2.00.

## HARDY PHLOX (Phlox Decussata)

**PROBABLY** the most satisfactory of all perennials, and a good space, in proportion to the size of the garden, should always be given to these plants. These are justly esteemed as the finest herbaceous plants. They are of dwarf habit, perfectly hardy, of very easy culture, and yield a profusion of bright showy bloom. They are hardly equalled by any other hardy plant for the decoration of the garden. (See cut.)

**Africa.** Brilliant carmine-red with deeper eye.  
**Baron Von Dedem.** Blood-red scarlet, immense trusses.  
**Beranger.** White ground, delicately shaded with pink and distinct red eye.  
**Bridesmaid.** Pure white, with crimson-carmine eye.  
**Coquillecot.** Bright orange-scarlet, with crimson eye; extra large compact flower heads.  
**Daubigny.** Rosy purple, with enormous florets.  
**Eclairer.** Dark crimson, center rose, surrounded with white; an excellent variety.  
**Etna.** Deep, fiery red; dark eye.  
**F. G. Von Lassburg.** The finest white flowers; very large; strong, vigorous grower.  
**Frau Anton Buchner.** The finest white yet introduced, having the largest truss and individual flower.  
**Geo. A. Sirohle.** Bright scarlet, with crimson red eye; large flowers, does not bleach.  
**Henry Murger.** White, with crimson-carmine center; a beautiful variety.  
**Independence.** An early, pure white.  
**Le Soleil.** Bright china rose, dark rose center.  
**Mme. Paul Dutrie.** Delicate lilac-rose, in shade like a soft pink Orchid; flowers very large, borne in immense panicles.  
**Miss Lingard.** (Suffruticosa.) Pearly white, early and free.  
**Obergartner Wittig.** Large, crimson-carmine flowers, vigorous grower.  
**Pantheon.** Bright carmine rose; large and fine.  
**R. P. Struthers.** Bright rosy-carmine, with claret-red eye.  
**Richard Wallace.** White, with bright crimson center, large flowers in immense panicles.  
**Rosenburg.** Bright, reddish violet with blood-red eye; individual flowers, large.  
**Selma.** Large trusses of very large pink flowers, with cherry-red eye; choice.  
**Snowflake.** Large flowering, pure white.  
**Thebaide.** Salmon, with carmine eye, dwarf.  
**Wm. Robinson.** Bright pink. Tall growing variety.  
**PRICE**—Any of the above, each, 20c; per dozen, \$2.00.  
 If wanted by mail, add 5c each; 50c per dozen for postage.



We do not guarantee or replace plants, shrubs or trees at prices quoted.



## HARDY HERBACEOUS PLANTS—Continued

### PHLOX SUBULATA

(Moss, or Mountain Pink)

An early spring-flowering type, with pretty moss-like evergreen foliage, which, during the flowering season, is hidden under the masses of bloom. An excellent plant for the rocky, the border, and invaluable for carpeting the ground, or covering graves.

Alba. Pure white. *Rosea*. Bright rose.  
Each, 20c; per dozen, \$2.00.

### PHYSOSTEGIA (False Dragon-Head)

One of the most beautiful of our mid-summer flowering *Perennials*, forming dense bushes three to four feet high, bearing spikes of delicate tubular flowers not unlike a gigantic heather.

Virginica. Bright, soft pink. Each, 20c; per dozen, \$2.00.  
Virginica Alba. Pure white. Each, 20c; per dozen, \$2.00.

### ORIENTAL POPPIES

(*Papaver Orientale*)

THESE are the regal representatives of this popular genus, far surpassing in splendor of bloom all the annual and biennial kinds, and for a gorgeous display of rich and brilliant coloring, nothing equals them during their period of flowering in May and June, and whether planted singly or in masses, their large flowers and freedom of bloom render them conspicuous in any position. After flowering, the plants die back, usually re-appearing along in early September, or as soon as the weather gets cool. During this resting period, care should be taken in cultivating the beds, that the roots are not disturbed, any disturbance at this time usually resulting in failure. We offer the following distinct varieties:

Diana. Beautiful salmon flowers.  
Goliath. Flowers scarlet, of enormous size.  
Mahogany. Dark red, shading to crimson maroon.  
Princess Victoria Louise. Soft lilac rose.  
Procerpine. Dark lilac, with large black blotch.  
Royal Scarlet. Scarlet flowers, with black center.  
Salmon Queen. Soft, salmon-scarlet; very distinct.  
Wittenbergia. Large scarlet flowers.

The above varieties... Each, 25c; per dozen, \$2.50.

Mixed Varieties... Each, 20c; per dozen, \$2.00.

### HARDY GARDEN PINKS

THESE old-fashioned favorites are absolutely perfect as an edging for the hardy border; as cut flowers they are indispensable.

Her Majesty. A pleasing plant growing to about one foot and bearing large, snowy white flowers.  
Each, 20c; per dozen, \$2.00.

White Reserve. A pure white variety, possessing a spicy fragrance. Ever-blooming.  
Each, 20c; per dozen, \$2.00.

Mixed Hardy Garden Pinks. Seedlings grown from a very select strain, which should produce a good percentage of double flowers... Each, 20c; per dozen, \$2.00.

### PYRETHRUM

THE large daisy-like blooms appear as early as June and continue in abundance continuously until September.

They delight in a rich soil with a natural drainage. They thrive best in the full sunlight. As the flowers die, the old stems should be cut off to encourage new blooms.

Hybridum Fl. Pl. Double flowering, mixed.  
Each, 20c; per dozen, \$2.00.

Hybridum, Single Flowering. In choicest mixture.  
Each, 20c; per dozen, \$2.00.

Uliginosum. (Giant Daisy.) Grows four to five feet high, and is covered with large white daisy-like flowers three inches in diameter from July to September.  
Each, 20c; per dozen, \$2.00.

### PEONIA OFFICINALIS

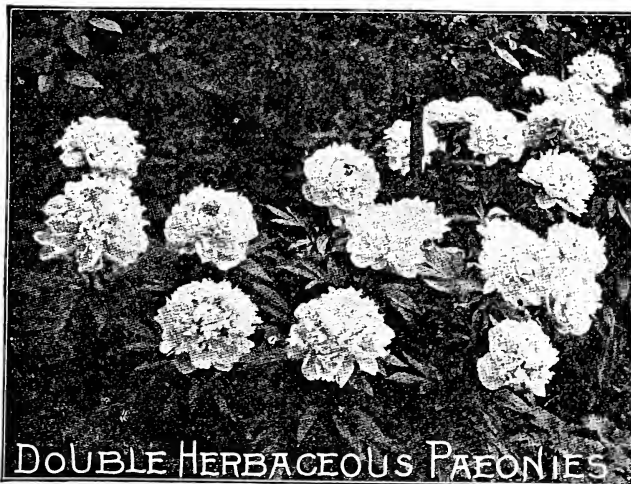
THIS type is the real old-fashioned "Peony," and comes into bloom from ten days to two weeks ahead of the named sorts. All are strong growers, with large, full, double, fragrant flowers.

Alba, blush-white; *Rosea*, rose; *Rubra*, crimson.  
Each, 25c; per dozen, \$2.50.

### Peonies—Japanese Single

THE single Peonies are even more beautiful than the double. They are larger in size of flowers and more delicate in coloring. No other plant flowering at the same season can vie with the Single Peony.

Mixed Colors... Each, 30c; per dozen, \$3.00.



DOUBLE HERBACEOUS PEONIES

### DOUBLE HERBACEOUS PEONIES

MAGNIFICENT, hardy plants, almost rivaling the rose in perfume, brilliancy, color and perfection of bloom. They are perfectly hardy, require little or no care, and produce larger or finer blooms when well established. (See cut.)

- Dorchester. A most beautiful, soft pink of fine form; dwarf grower... Each, 35c.
- Duc de Wellington. Large bomb, white guards, sulphur center; fragrant... Each, 40c.
- Eduis Superba. Bright, mauve pink color mixed with lilac; fragrant... Each, 25c.
- Felix Crousse. Large, double, ball-shaped bloom; color brilliant red... Each, 50c.
- Festiva Maxima. White, with carmine tipped flakes to a few center petals... Each, 40c.
- Floral Treasure. Large, full, clear pink, with lighter center... Each, 40c.
- Hamlet. Color very dark red... Each, 25c.
- Jeanne D'Arc. Outside petals rose colored, inside straw colored, with crimson spots... Each, 60c.
- Livingstone. Rosy pink, silvery reflex... Each, 75c.
- Louis Van Houtte. Deep carmine-rose, tipped silver, with a brilliant, fiery reflex... Each, 30c.
- Mme. Calot. Large, pale hydrangea-pink, with darker shadings in the center... Each, 40c.
- Madame Boulanger. Color glossy, tender rose, shading to heliotrope, bordered with silvery flesh... Each, 40c.
- Mathilde de Roseneck. Late, soft flesh-pink, shading deeper toward the center with tints of lilac and chamois; petals bordered with silver and occasional narrow edgings of bright carmine... Each, 50c.
- Marie Lemoine. Large, sulphur white, shaded with pink; magnificent... Each, 40c.
- Meissonier. Broad outer petals, brilliant purple amaranth, inner petals crimson, free bloomer... Each, 35c.
- Purpurea Superba. Large purplish-crimson, large guards... Each, 30c.
- Queen Victoria. Large, full compact bloom, opening flesh, changing to white, center petals tipped with carmine... Each, 30c.
- Rosa Magna. Beautiful, large, rose colored Peony. Very free... Each, 25c.
- Thorbeckii. Deep red pink, of fine form, lighter in center. Medium dwarf... Each, 35c.
- Tricolor Rosea. Dark violet rose; large globular flower... Each, 40c.

MCCULLOUGH'S PEONY COLLECTION—one each of the above twenty named varieties for \$7.00, purchaser paying express charges.

We can supply large clumps of many varieties of Peonies from \$1.00 to \$1.50 each.

If to be sent by mail, add 5c each, 50c per dozen.

### Peonies in Mixture

THEY are from our named varieties. We keep the colors separate and offer them to color as follows: White, red and pink in mixture... Each, 25c; per dozen, \$2.50.

## HARDY HERBACEOUS PLANTS

(Continued)

### RUDBECKIA (Cone Flower)

- A** VARIETY of these will furnish a supply of cut flowers from early July until September. They are extremely hardy, doing well with every one. They could be termed "a city garden perennial," doing so well with little attention.
- Golden Glow.** Double canary yellow flowers, six feet; August.....Each, 20c; per dozen, \$2.00.
- Newmanni.** Single dark orange, with deep purple cone center; three feet high; flowers from July to September. Each, 20c; per dozen, \$2.00.
- Purpurea.** (Giant Purple Cone Flower.) The flowers remain in perfect condition on the plants for weeks at a time. In fact, we do not know of any other perennial where the flowers last so long in perfect condition. Flowers from July to September; two and a half feet high.....Each, 20c; per dozen, \$2.00

### SALVIA AZUREA

- Azurea.** Grows two to three feet high and produces pretty sky-blue flowers in great profusion during August and September.....Each, 25c; per dozen, \$2.50.

### SCABIOSA

- Caucasia.** (Blue Bonnet.) Blooms from June to September, flowers a soft shade of lavender borne on stems 18 to 24 inches high.....Each, 25c; per dozen, \$2.50.
- Japonica.** They last a long time when picked and placed in water. Bears lavender-blue flowers on long stems from July to September.....Each, 25c; per dozen, \$2.50.

### SEDUM (Stone Crop)

- Acre.** (Golden Moss.) Much used for covering graves; foliage green, flowers bright yellow. Each, 20c; per dozen, \$2.00.
- Album.** Green foliage, white flowers. Each, 20c; per dozen, \$2.00.
- Sexangulare.** Dark green foliage, yellow flowers. Each, 20c; per dozen, \$2.00.
- Spectabilis.** Erect growing; height 18 inches with broad light-green foliage and immense heads of handsome, showy, rose colored flowers. Each, 20c; per doz., \$2.00.
- Spectabilis Brilliant.** Similar in growth to the above with bright, amaranth-red flowers. Each, 20c; per doz., \$2.00.
- Spurium.** Grows 6 inches high with attractive pink flowers. Each, 20c; per dozen, \$2.00.

### SHASTA DAISY

**L**ARGE, snowy-white flowers, in bloom continuously throughout the Summer and Fall.

- Alaska.** A decided improvement on the original, very free-flowering, with blooms 4½ to 5 inches across, of pure, glistening white...Each, 20c; per dozen, \$2.00.
- King Edward.** Very large flowers; plant of vigorous growth.....Each, 25c; per dozen, \$2.50.

### SPIREA (Goat's Beard, Meadow Sweet)

**Filipendula, fl. pl.** (Double Flowered Drop-wort.) Pretty fern-like foliage, with double white flowers on stems 15 inches high during June and July.

- Palmata Elegans.** Pure white flowers with protruding pink anthers during June and July; 3 feet. Each, 25c; per dozen, \$2.50.

### STATICE (Great Sea Lavender)

**Latifolia.** Immense heads, 2 to 3 feet across, small, blue flowers from June to September, which last for months if cut and dried.....Each, 20c; per dozen, \$2.00.

### STOKESIA (Cornflower Aster)

**Cyanea.** Produces showy, aster-like, deep blue flowers which measure from 4 to 5 inches across. 18 to 24 inches high, blooming freely from July until frost.

- Alba.** White flowers and green foliage. Each, 20c; per dozen, \$2.00.

### SWEET WILLIAM (Dianthus Barbatius)

Well known hardy plant. We offer a superb strain of mixed single and double-flowering sorts.

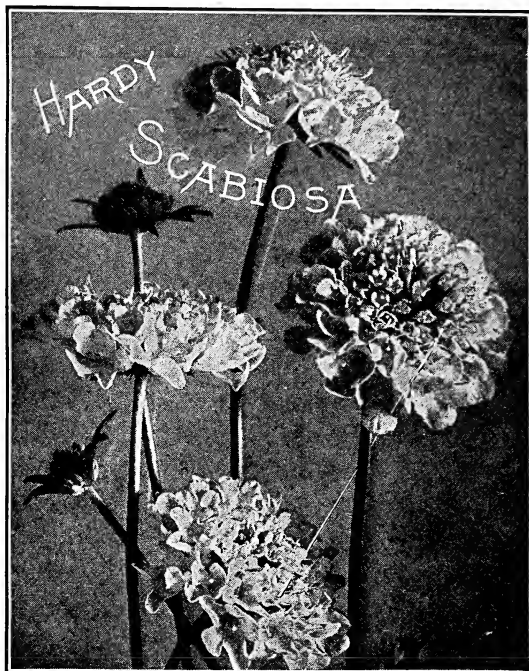
- Newport Pink.** Salmon or watermelon-pink flowers. Each, 20c; per dozen, \$2.00.

### VALERIANA

**Coccinea.** Showy heads of reddish flowers, blooming from June to October. Height, 2 feet.

- Officialis.** (Hardy Garden Heliotrope.) Produces showy heads of rose-tinted white flowers during June and July, with strong heliotrope odor; 3 to 4 feet. Each, 20c; per dozen, \$2.00.

We do not guarantee or replace plants, shrubs or trees at prices quoted.



### VINCA MINOR

(Periwinkle or Trailing Myrtle)

Dwarf evergreen trailing plant, is used for carpeting the ground where it is too shady for other plants to thrive. Each, 20c; per dozen, \$2.00.

### VERONICA (Speedwell)

**Amethystina.** Grows 2 feet high; bears amethyst-blue flowers in June and July. Each, 20c; per dozen, \$2.00.

**Incana.** Bright silvery foliage, with spikes of amethyst-blue flowers 1 foot high during July and August.

Each, 20c; per dozen, \$2.00.

**Longifolia Subsessilis.** A pretty species with blue flowers, produced on spikes a foot long, continuing in bloom the entire Summer and Fall. Each, 20c; per dozen, \$2.00.

**Spicata.** An elegant border plant, growing about 1½ feet high, producing long spikes of bright blue flowers.

Each, 20c; per dozen, \$2.00.

**Virginica.** Long spikes of white flowers in July and August; 3 to 4 feet.....Each, 20c; per dozen, \$2.00.

### VIOLAS, or TUFTED PANSIES

(Viola Cornuta)

They flower continuously for nearly eight months in the year and while their flowers are not so large as those of the Pansy, their bright colors make them welcome additions to any garden.

**Admiration.** Soft purple, with dark blotch.

**Lutea Splendens.** Rich golden yellow.

**Papilio.** Violet, with dark eye; the most effective for massing.

**White Perfection.** A fine white.

Each of the above, 15c; per dozen, \$1.50.

### YUCCA FILAMENTOSA

(Adams's Needle)

A hardy ornamental foliage and evergreen plant with long, narrow leaves that are bright green the whole year round. The flowers are white, produced on long spikes.

Each, 20c; per dozen, \$2.00.

### ORNAMENTAL GRASSES

**Erianthus Ravennae.** (Plume Grass.) Grows six to eight feet high, and produces plumes in Fall.

**Eulalia Gracillima.** (Japan Rush.) The most beautiful of all the Eulalias, with narrow, graceful foliage, entirely green without variegation, except that the mid-rib is of a silver sheen.

**Eulalia Japonica Variegata.** Leaves striped white and green longitudinally.

**Eulalia Zebrina.** (Zebra Grass.) A peculiar variegated grass, growing six feet high. The variegation is unlike that of any other plant, being across the leaf in regular bands, dark green and light.

Above, each, 25c; per doz., \$2.50; extra by mail, 10c each.

Cannot accept orders for Hardy Perennial plants totaling less than One Dollar.

# Ornamental Flowering Shrubs

**SHRUBS** are as much a part of the garden as the lawn or flower borders, and a well arranged planting presents an attractive appearance throughout the entire year.

Thorough preparation of the soil by spading, and the addition of a liberal quantity of sheep or stable manure or bone meal will be well repaid by strong, vigorous, healthy growth. In planting, care should be taken not to overcrowd, allowing sufficient room for future development, unless an immediate effect is wanted—in which case they may be planted closer and some of them moved when necessary. The majority of the dwarf-growing kinds may be set about three feet apart, the tall, strong growers about five feet apart.

Our Shrubs are transplanted every two or three years and are furnished with plenty of fibrous roots and should not be compared to stock that is never moved from the cutting beds until sold.

**Stocks of ORNAMENTAL FLOWERING SHRUBS** have become greatly depleted in the last two years, consequently it is no longer possible to offer two or more sizes, except in a few instances. Our prices contemplate furnishing the largest sizes now available.

We give no warranty, express or implied, as to description, quality, productiveness, or any other matter of any seeds, bulbs or plants we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

**ALMOND, DOUBLE FLOWERING.** A desirable class of early flowering shrubs; erect, slender branches, covered with small double pink flowers.

Pink flowering..... Each, **\$1.25**; per dozen, **\$12.50**.

White flowering..... Each, **\$1.25**; per dozen, **\$12.50**.

**ALTHEA.** (Rose of Sharon.) The Altheas are among the most valuable of our hardy shrubs on account of their late season of blooming, which is from August to October. Are also extensively used as hedge plants.

**Boule-De-Feu.** Double red.  
Each, **60c**; per dozen, **\$6.00**.

**Grandiflora Superba.** Double bluish, white shaded carmine..... Each, **60c**; per dozen, **\$6.00**.

**Jeanne D'Arc.** Double White.  
Each, **60c**; per dozen, **\$6.00**.

**Meehani.** Beautiful variegated foliage with satiny lavender colored single flowers, open and free blooming.  
Each, **75c**; per dozen, **\$7.50**.

**Single Rose, White and Purple.**  
Each, **60c**; per dozen, **\$6.00**.

**Double Rose, White and Purple.**  
Each, **60c**; per dozen, **\$6.00**.

**BERBERIS. Thunbergii.** (Japanese Barberry.) One of the most beautiful shrubs either for hedging or general purposes. It is of a neat, compact growth and the foliage is beautiful at all times, and in the fall turns to a most brilliant crimson color. The plant is covered with bright scarlet berries all the fall and winter. It seldom grows over four feet high.

15 to 18 inches, Each, **40c**; per dozen, **\$4.00**.

18 to 24 inches, Each, **50c**; per dozen, **\$5.00**.

24 to 30 inches, Each, **65c**; per dozen, **\$6.50**.

**BUDDLEYA.** (Butterfly Shrub or Summer Lilac.) **Variegata Magnifica.** Flowers continuously all season. The flower racemes are composed of many little blossoms in the shape and color of lilacs.

Plants, Each, **35c**; per dozen, **\$3.50**; clumps, each, **75c**.

**CALYCANTHUS FLORIDUS.** (Sweet-Scented Shrub.) Flowers fragrant, double and of a chocolate color.  
Each, **60c**; per dozen, **\$6.00**.

**CERCIS CANADENSIS.** (Judas Tree or Red Bud.) Very showy and beautiful when in bloom. All the branches and twigs are covered with a mass of small pink flowers early in the spring, before the leaves appear.

Each, **75c**; per dozen, **\$7.50**.

**CHIONANTHUS VIRGINICA.** (White Fringe Tree.) Large shrub or small tree with large, heavy leaves almost hidden in spring by a thick mist of fragrant, drooping white flowers. Each, **60c**; per dozen, **\$6.00**.



**Clethra Alnifolia**

**CLETHRA ALNIFOLIA.** (Sweet Pepper Bush.) Dark green foliage and upright spikes of creamy white, fragrant flowers in August. (See cut.)

Each, **60c**; per dozen, **\$6.00**.

**CORCHORUS.** (Kerria.) Globe Flower or Japanese Rose, Japonica. A shrub four to six feet tall. Native of Japan. Leaves bright green, fading in autumn to tones of yellow. Flowers numerous, bright yellow, large and showy. A charming old-fashioned plant.

Each, **60c**; per dozen, **\$6.00**.

**CORNUS FLORIDA.** (White Flowering Dogwood.) The flowers, produced in spring before the leaves appear, are from three to three and one-half inches in diameter, white and very showy. They begin to appear as the Magnolia flowers are fading, and are invaluable for maintaining a succession of bloom. Foliage grayish green, glossy and handsome, and in the autumn turns to a deep red; one of the most showy flowering trees.

Each, **\$1.25**; per dozen, **\$12.50**.

**CORNUS FLORIDA RUBRA.** (Red Flowering Dogwood.) A rare variety, similar to the common type, except in color of the flowers, which are rich rosy-red. The two varieties make a fine contrast.

Each, **\$2.50**; per dozen, **\$25.00**.

**CRAB.** (Bechtel's Double Flowering.) Most beautiful of all the flowering Crabs; hardy. Trees are covered in early spring with large, beautiful, double, fragrant flowers, resembling small roses of a delicate pink.

Each, **\$2.00**; per dozen, **\$20.00**.

**CYDONIA JAPONICA.** (Japan Quince.) The scarlet-red flowers appear before the leaves and are followed by yellowish-green globular fruits.

Each, **50c**; per dozen, **\$5.00**.

**DESMODIUM PENDULIFLOZUM.** A shrub-like plant that dies to the ground in winter, but comes up vigorously in spring. Bears during September sprays of rose-colored flowers..... Each, **65c**; per dozen, **\$6.50**.

**DEUTZIA LEMOINEI.** Habit dwarf, flowers white. One and one-half to two feet. Each, **60c**; per dozen, **\$6.00**.

**DEUTZIA PRIDE OF ROCHESTER.** Large double white flowers, slightly tinted with rose.

Each, **60c**; per dozen, **\$6.00**.

**ELDER, GOLDEN.** (Sambucus.) Golden yellow foliage. Each, **65c**; per dozen, **\$6.50**.

We do not guarantee or replace plants, shrubs or trees, at prices quoted.

## ORNAMENTAL FLOWERING SHRUBS—Continued

**EUONYMUS EUROPAEUS.** (Burning Bush.) Conspicuous in autumn and winter, when loaded with scarlet seed pods, from which orange-colored berries hang on slender threads. Each, **75c**; per dozen, **\$7.50**.

**FORSYTHIA VIRIDISSIMA.** (Golden Bell.) Erect growth and spreading branches; flowers bright yellow. . . . Each, **60c**; per dozen, **\$6.00**.

**HALESIA TETRAPTERA.** (Silver Bell.) White, bell shaped flowers in May. Bears four winged fruit from one to two inches long.

Each, **65c**; per dozen, **\$6.50**.

**HYDRANGEA ARBORESCENS STERILIS.** (Snowball-Hydrangea.) Snowy white blooms; will flower for fully three months.

Each, **65c**; per dozen, **\$6.50**.

**HYDRANGEA PANICULATA GRANDIFLORA.** The flowers which are borne in dense pyramidal panicles in the greatest profusion, are white when they first open, but gradually change to rose and remain in good condition for weeks. (See cut.)

18 to 24 inches, each, **65c**; per dozen, **\$6.50**.

2 to 3 feet, each, **75c**; per dozen, **\$7.50**.

**HYDRANGEA PANICULATA GRANDIFLORA.** Standard or Tree-Shaped Plants. These are four and five years old, trained to tree-shape with about three feet of straight stem and nicely shaped heads. Four to five feet, each, **\$1.75**.

**LILACS.** (True Syringa.) (See cut.) **Purple.** (Syringa Vulgaris.) The common purple species, and one of the best.

Each, **75c**; per dozen, **\$7.50**.

**White.** (Syringa Vulgaris Alba.) Flowers pure white, very fragrant.

Each, **75c**; per dozen, **\$7.50**.

**Price of any of the following named Lilacs.**

Fine plants each, **\$1.00**; per dozen, **\$10.00**.

**Charles X.** Rapid grower, reddish purple flower.

**Madame Lemoine.** Double white flowers.

**Michael Buchner.** Double pale lilac.

**LONICERA.** (Bush, or Upright Honeysuckle.) Handsome upright shrubs. They thrive in almost any soil.

**Ledebouri.** Very distinct, producing red flowers in May

Each, **50c**; per dozen, **\$5.00**.

**Morrowi.** A handsome Japanese variety with white flowers during May, but especially valuable for its bright red fruit during the summer and autumn months.

Each, **50c**; per dozen **\$5.00**.

**Tartarica.** (Tartarian Honeysuckle.) A large shrub with numerous upright or spreading branches. Flowers borne in great profusion in late spring. Fruit red or orange, ripening in summer. Red, white and pink.

Each, **60c**; per dozen, **\$6.00**.

**MAHONIA AQUAFOLIA.** (Holly-leaved Mahonia.) A native species of medium size, with purplish, shining leaves, and showy, bright yellow flowers succeeded by bluish berries. 18 to 24 inches, each, **75c**; per doz., **\$7.50**.



Lilac

**PRIVET.** See Hedge Plants.

**PHILADELPHUS OR SYRINGA.** (Mock Orange or Orange Blossoms.) A shrub that can always be depended upon to give splendid satisfaction. No insects bother it, and in May and June the bushes are literally covered with flowers.

**Grandiflorus.** (Large-flowering Mock Orange.) Without a doubt one of the most popular shrubs grown, and ought to be in every garden. Flowers are pure white and very large. . . . . Each, **50c**; per dozen, **\$5.00**.

**RHUS COTINUS.** (Purple Fringe, or Smoke Tree.) A low, shrubby tree, covered in midsummer with large clusters of feathery flowers, giving the appearance of a cloud of smoke or mist. Each, **65c**; per dozen, **\$6.50**.

**ROBINIA HISPIDA.** (Rose Acacia.) A very handsome shrub. The leaves are similar to those of the Locust. In June and July long panicles of rose-colored flowers hang from the branches. Each, **65c**; per dozen, **\$6.50**.

**SAMBUCUS.** *Aurea.* (Golden Elder.) Attractive golden foliage and desirable to mix with other shrubs.

Each, **65c**; per dozen, **\$6.50**.

**SPIREA.** A large group of showy, free-flowering, hardy shrubs.

**Anthony Waterer.** Makes nice, round bushes, three feet high and wide; beginning to bloom in summer, continuing until fall. Rose red flowers in large, round clusters all over the bush. 12 to 15 inches.

Each, **65c**; per dozen **\$6.50**.

**Billardii.** Pink flowers; bloom nearly all summer. It is grand for planting in masses.

Each, **50c**; per dozen, **\$5.00**.

**Callosa Alba.** A white flowering variety of dwarf, bushy, symmetrical form. Flowers all summer. 18 to 24 inches,

Each, **60c**; per dozen, **\$6.00**.



Hydrangea Paniculata Grandiflora

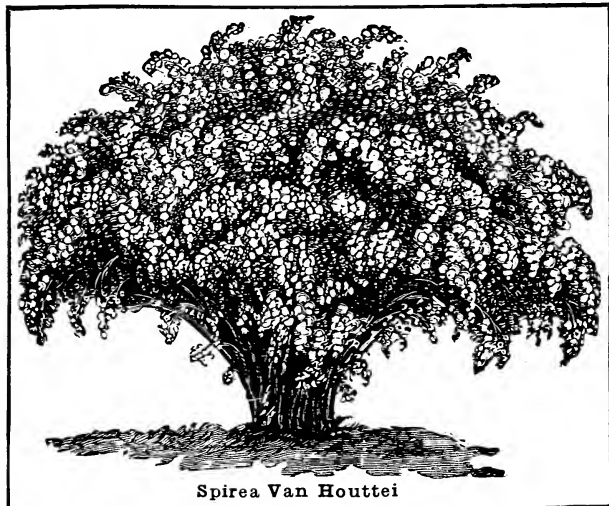
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## ORNAMENTAL FLOWERING SHRUBS—Continued

### SPIREA—Continued

- Opulifolia Aurea.** (Virginian Guelder Rose.) Golden-tinted foliage and large white flowers in June; two to three feet. . . . . Each, **50c**; per dozen, **\$5.00**.
- Prunifolia Fl. Pl.** (Old Bridal Wreath.) Blooms in May, with pure white, double flowers. . . . . Each, **65c**; per dozen, **\$6.50**.
- Reevesii Fl. Pl.** Tall, with dark, bluish green foliage, and large, double, pure white flowers, in May and June. . . . . Each, **50c**; per dozen, **\$5.00**.
- Thunbergii.** Of dwarf, graceful form. Branches slender and somewhat drooping; foliage narrow and yellowish green; flowers small, white, appearing early in spring. . . . . Each, **60c**; per dozen, **\$6.00**.



Spirea Van Houttei

**Van Houttei.** (Improved Bridal Wreath.) This is without a doubt the most beautiful and useful of shrubs. Always effective if planted singly or in groups on the lawn, in front of the porch, in shrub borders or in a hedge. Handsome throughout the entire season, but when in flower it is a complete fountain of white bloom. Clusters of white florets are set close along the drooping stems. Blooms in May. (See cut.)

Two to three feet, each, **45c**; per dozen, **\$4.50**.

Three to four feet, each, **60c**; per dozen, **\$6.00**.

**SYMPHORICARPUS. Racemosus.** (Snowberry.) A graceful shrub, three to five feet tall, with slender branches. Flowers white or pinkish, in loose racemes, in summer. Berries white, produced in showy, profuse clusters, the branches bending under their weight.

Each, **60c**; per dozen, **\$6.00**.

**SYMPHORICARPUS. Vulgaris.** (Coral-Berry or Indian Currant.) A grand shrub, producing a wealth of red or purplish berries, which remain on the branches all winter. Flowers greenish red in summer. Berries coloring in early autumn, very showy. Does well in shade.

Each, **50c**; per dozen, **\$5.00**.

**TAMARIX. Africana.** (Tamarisk.) Strong, slender, tall growing, irregular shrubs, with feathery foliage and small, delicate pink flowers. Each, **50c**; per dozen, **\$5.00**.

**VIBURNUM.** (Snowballs and High Bush Cranberry.) The Viburnums are one of the most useful shrubs, being very hardy and of good habit. They all have white flowers mostly on flat heads and with a few exceptions are noted for their handsome clusters of berries.

**Opulus.** (High Bush Cranberry.) The white flowers in June are followed in autumn by bright scarlet berries, which are very attractive until late in winter.

Each, **50c**; per dozen, **\$5.00**.

**Opulus Sterilis.** (Guelder Rose or Snowball.) Of spreading habit, bearing flat clusters of single white flowers, which afterwards produce brilliant red berries which hang to the plant all winter; very decorative.

Each, **60c**; per dozen, **\$6.00**.

**Plicatum.** (Japan Snowball.) One of the choicest hardy shrubs, with healthy dark foliage; the perfect balls of pure white flowers are borne in great profusion in May.

Each, **65c**; per dozen, **\$6.50**.

**WEIGELIA.** (Diervilla.) These shrubs bloom after the lilacs, in June and July. Their large flowers are of wide trumpet-shape, colors from white to red, and borne in clusters thickly along the branches.

**Candida.** White flowering Weigelia, flowering throughout the summer. . . . . Each **60c**; per dozen, **\$6.00**.

**Eva Rathke.** The finest Weigelia in cultivation. Flowers continuously throughout the summer and autumn; of an entirely distinct color, being a rich, ruby carmine. Should be in every garden. Two to three feet.

Each, **65c**; per dozen, **\$6.50**.

**Rosea.** A beautiful shrub, with rose-colored flowers in May and June. . . . . Each, **60c**; per dozen, **\$6.00**.

**Rosea Nana Variegata.** A neat dwarf shrub, valuable for the clearly defined variegation of green, yellow and pink in its leaves; flowers delicate rose and pink; one of the finest variegated-leaved shrubs. Two to three feet. . . . . Each, **60c**; per dozen, **\$6.00**.

## ORNAMENTAL TREES

**CATALPA BUNGEI.** (Umbrella Catalpa.) Grafted on stems 6 to 9 feet high, it makes an umbrella shaped top without pruning. Perfectly hardy. Leaves large, glossy, heart-shaped, deep green, lay like shingles on a roof, always making a symmetrical head. One of the most unique trees; desirable for lawns, park and cemetery planting. 6 to 7 feet, each, **\$2.25**; selected two-year-old, each, **\$3.00**.

**MAPLES, JAPANESE.** These are exceedingly beautiful, especially in spring, when they burst into leaf.

**Polymorphum Atropurpureum.** Leaves deep blood-red. . . . . Each, **\$5.00**.

**Polymorphum Atropurpureum Dissectum.** Dark maroon, deeply serrated, thread-like leaves. . . . . Each, **\$6.00**.

**MULBERRY, TEAS' WEEPING.** The most graceful hardy weeping tree in existence. Forms a perfect-shaped head and the slender branches grow downward parallel with the stem, forming an umbrella-like shape. It takes the foremost place among weeping trees; has beautiful foliage and luscious fruit, is hardy, enduring the cold of the North and the heat of the South; safe and easy to transplant. Admirably adapted for ornamenting small or large grounds, or for cemetery planting. 1 year heads, each, **\$2.75**; 2 to 3 year heads, each, **\$3.25**.



Catalpa Bungei



# Hardy Hybrid Perpetual Roses

**A**MONG all the hardy plants few are so commonly well liked or more valuable than the roses, particularly the "June Roses," as the Hybrid Perpetuals are called. They are strong growers, bearing large globular flowers, and are so hardy that they succeed in any locality. The severest winters will not kill them, but it is generally conceded that protection is beneficial when the straw, manure, corn-stalks or other covering is not so thick as to be unnatural and smother them.

Hardy Hybrid Perpetual Roses should be planted in the Fall, because dormant stock for Spring delivery is unsatisfactory on account of being carried in storage cellars all winter. For this reason we have discontinued making Spring deliveries on Hardy Perpetual and Hardy Climbing Roses.



**Strong Two-Year-Old Plants Ready for Delivery During October and November.**

**Price—Extra Strong Plants, each, \$1.00; per doz., \$10.00.**  
Sent by express at customer's expense.

If wanted by mail, add 10c each, 75c per dozen, for postage.

**Captain Christy.** Delicate flesh pink, very free.

**Eugene Furst.** Flowers velvety crimson with maroon shading.

**Frau Karl Druschki.** An exquisite flower of the purest white.

**General Jacqueminot.** The old favorite; velvety crimson.

**John Hopper.** Brilliant crimson, large flowers, remarkable for their fragrance.

**Mme. Plantier.** Pure white, large and double, free bloomer, fine for cemetery planting.

**Magna Charta.** Deep pink, large sweet scented and of fine form; one of the hardest.

**Marshall P. Wilder.** A grand rose of large full flowers of a bright carmine red.

**Mrs. John Laing.** Large beautiful pink blooms, borne on long sturdy stems.

**Paul Neyron.** An immense rose of a deep rose color.

**Prince C. De Rohan.** (The Black Rose.) Deep velvety crimson passing to intense maroon.

**Ulrich Brunner.** Cherry crimson, large fine form, strong grower and hardy.

## Hardy Climbing Roses

We Offer the Best and Most Distinct Varieties.

**PRICE—Strong 2-Year-Old Dormant Stock for Fall Planting, each, \$1.00; per dozen, \$10.00.**

By Express at Purchaser's Expense.

**American Pillar.** Color is a delightful shade of pink.

**Crimson Rambler.** Bright crimson flowers.

**Dorothy Perkins.** Beautiful shell pink flowers.

**Dr. W. Van Fleet.** Rich, flesh-pink flowers.

**Flower of Fairfield.** Large trusses of crimson flowers.

**Hiawatha.** Brilliant, ruby-carmine flowers.

**Philadelphia Rambler.** Deep crimson flowers.

**Lady Gay.** A delicate cherry pink.

**Silver Moon.** Large pure white flowers.

**Tausendschon.** Beautiful soft pink flowers.

**Gardenia.** (Wichuriana) Flowers cream color.

**Veilchenblau.** (Blue Rambler.) Bluish flowers.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

## HEDGEPLANTS

**CALIFORNIA PRIVET.** (*Ligustrum Ovalifolium*.) Its foliage is a rich dark-green, and is nearly evergreen, remaining on the plant until mid-winter. It is of free growth and succeeds under the most adverse conditions, such as under dense shade of trees. The most advantageous manner of planting is in double rows, the two rows being about 8 inches apart. The plants should be set 12 to 15 inches apart in the row, alternating the plants. In order to secure a dense hedge from the base up, the plants should be severely pruned the first two seasons.

18 to 24 inches, \$1.00 per dozen;  
\$6.00 per 100.

24 to 36 inches, \$1.25 per dozen;  
\$7.50 per 100.

## HARDY CLIMBING PLANTS

**AMPELOPSIS VEITCHII.** (Japan Creeper or Boston Ivy.) Best climbing plant for covering brick or stone walls.

Each, 50c; per dozen, \$5.00; by mail, each, 55c.

**AMPELOPSIS QUINQUEFOLIA.** (Virginia Creeper.) For covering walls, verandas and trunks of trees.

Each, 50c; per dozen, \$5.00; by mail, each, 55c.

**BIGNONIA RADICANS.** (Trumpet Vine.) Flowers trumpet-shaped, bright scarlet.

Each, 25c; per dozen, \$2.50; by mail, each, 30c.

## CLEMATIS (Small Flowering)

**Paniculata.** (Japanese Clematis.) Pure white, very fragrant, borne in large clusters; small flowering.

Each, 50c; per dozen, \$5.00; by mail, each, 55c.

## EUONYMUS RADICANS

This vine is especially adapted for covering low foundation walls. Has deep evergreen foliage and is extremely hardy. Can also be used as an edging plant as it may be clipped same as boxwood. Each, 50c; per dozen, \$5.00.

## HONEYSUCKLES

Each, 50c; per dozen, \$5.00; by mail, each, 60c.

**Aurea Reticulata.** Foliage variegated yellow and green, with yellowish white, fragrant flowers.

**Monthly Fragrant or Dutch.** Blooms all Summer.

**Common Woodbine.** A strong, rapid grower; flowers red outside, buff within.

**Halleana.** Nearly evergreen; flowers pure white.

**Scarlet Trumpet.** Scarlet inodorous flowers.

**IVY, English.** Beautiful, evergreen vine.

Each, 50c; per dozen, \$5.00; by mail, each, 55c.

**MATRIMONY VINE.** The branches may be trained over fences or trellises.

Each, 35c; per dozen, \$3.50; by mail, each, 40c.

**VITIS HETEROPHYLLA VARIEGATA.** Dark green foliage, variegated with white and pink.

Each, 30c to \$1.00.

**WISTARIA, CHINESE.** Delicate, violet blue blossoms.

Each, 60c; per dozen, \$6.00; by mail, each, 65c.

**WISTARIA, CHINESE, WHITE.** Pure white flowers.

Each, 60c; per dozen, \$6.00; by mail, each, 65c.

# Fruit Trees

**S**ELLECT thrifty young trees in preference to old or very large ones; the roots are more tender and fibrous and they bear transplanting better and are more apt to live; they can also be more easily trimmed and shaped to any desired form, and in the course of a few years will usually outstrip the older ones in growth. If not prepared to plant when your stock arrives, "heel in" by digging a trench deep enough to admit all the roots, and setting the trees therein, carefully pack the earth about the roots.

By Express or Freight at Expense of Purchaser.

We do not guarantee or replace Trees or Shrubs at prices quoted.

While we make no charge for packing or delivery to freight or express offices here, still on account of increased cost of operation we cannot accept orders for Fruit Trees in smaller quantities than six, either straight or assorted, at prices quoted. In smaller quantities, add 25c per tree or make up a Club Order among your friends that can be shipped to one address.

## APPLES, STANDARD

5 to 7 feet high. Each, **\$1.35**; per dozen, **\$13.50**.

### SUMMER VARIETIES

**Early Harvest.** (Early June, Yellow Harvest). Fruit is medium size to large, the skin tender, very smooth, clear, pale, waxen yellow; flesh is white, rather fine, crisp, tender, juicy, at first briskly sub-acid, but eventually becoming milder and more agreeable for dessert. Ripens in July and August.

**Red Astrachan.** Fruit of good medium size; yellow, largely covered with red, presenting a striped appearance; flesh white, often strongly tinged with red, crisp, tender, juicy, sub-acid and of good quality. One of the most beautiful early market apples. Ripens in August.

**Yellow Transparent.** (White Transparent. Grand Sultan). The tree is an upright grower and usually bears fruit the next year after planting. Fruit of medium size, pale, waxen yellow, pleasantly acid, tender and good, splendid for home and market. Ripens in July and August, before Early Harvest.

## APPLES, STANDARD

5 to 7 feet high. Each, **\$1.35**; per dozen, **\$13.50**.

### AUTUMN VARIETIES

**Delicious.** This is probably the best of the newer varieties, having been satisfactorily tested in many parts of the country. Fruit is brilliant dard red, shading to yellow at the blossom end. Flesh is crisp, fine grained and quite juicy; flavor slightly acid but very pleasing.

**Duchess of Oldenburg or Duchess.** A variety of great hardiness, yielding abundantly in all sections. Fruits are large, rounded, yellow, striped red, tender, juicy and of the best quality for cooking.

**Fall Rambo.** Fruit mottled and striped red and yellow, of medium size and good flavor; widely cultivated and highly esteemed for eating. Tree is a strong grower and heavy bearer.

**Madden's Blush.** Fruit of uniformly good size, smooth, round, beautifully flushed with brilliant red on a yellow ground. Good for table use. One of the most beautiful and productive Fall varieties. Ripens in August and September.

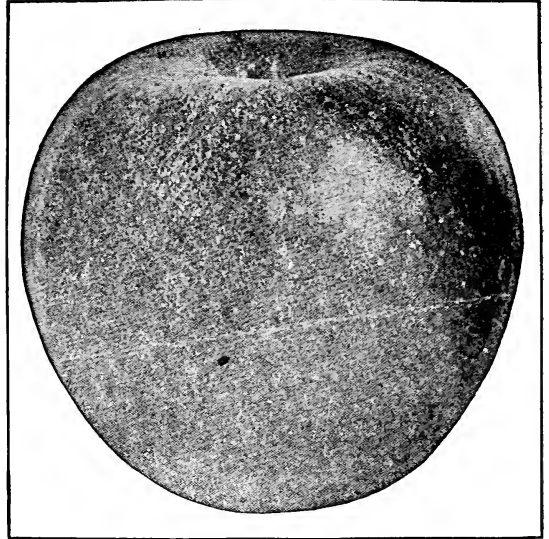
## APPLES, STANDARD

5 to 7 feet high. Each, **\$1.35**; per dozen, **\$13.50**.

### WINTER VARIETIES

**Baldwin.** A great market apple, very productive; fruit large, deep red, crisp, juicy and rich. December to March.

**Banana.** The fruit is large, clear, pale yellow with pinkish-red blush; flesh is tender and aromatic with a suggestion of banana flavor. November to February.



### WINTER VARIETIES—Continued

**Ben Davis.** (New York Pippin.) A remarkable keeper and profitable market apple in many sections. Large, handsome, brightly striped with red, variable in flavor. Remarkably vigorous and fruitful. January to April.

**Gano.** Similar but superior to the Ben Davis, bearing a handsome and better quality of fruit that is large and dark red. Flesh is pale yellow, sub-acid, of good flavor and good keeping qualities. Very productive. December to March.

**Grimes Golden.** Fruit medium to large of transparent golden yellow and of best quality. Flesh tender, juicy, spicy and rich. November to February.

**Jonathan.** Fruit is medium sized, pale yellow, heavily flushed with red; the flesh is white, juicy, tender and mild sub-acid. Excellent quality. November to March.

**Northern Spy.** Fruit large, striped crimson in the sun; juicy, rich and aromatic, retaining these qualities until late Spring or Summer. Valuable as an Aphis-resisting sort. January to June.

**Rome Beauty.** (Royal Red, Rome, Phoenix). The fruit is large and handsome, yellow with crimson cheek, tender, juicy, with yellow flesh; uniform in size, fine in appearance and of good quality. November to February.

**Stayman's Winesap.** Fruit medium size, mostly covered with red on a yellow ground; flesh fine, crisp, juicy, very tender and highly flavored. November to April, but will keep until May. A favorite apple for cider.

**Winesap.** Fruit medium large, skin almost entirely covered with dark red; flesh yellow, crisp, with a rich flavor. December to March.

**York Imperial.** (Johnson's Fine Winter, Shepp). Fruit medium size, attractive, smooth, clear, waxen-yellow, flushed with carmine. The flesh is crisp, firm, sub-acid and retains its flavor to the last. December to February.

## CRAB APPLES

5 to 7 feet high. Each, **\$1.35**; per dozen, **\$13.50**.

**CRAB** Apples do well on almost all soils. Trees are hardy and vigorous; come into bearing early and bear almost every year. Excellent for cider, vinegar and jelly.

**Hyslop.** Bears large crimson fruit in clusters. October.

**Transcendent.** Largest and best of the Siberian Crabs. Tree is extremely hardy, good grower and usually very productive. Fruit is bright yellow, striped with red and one and one-half to two inches in diameter. Flesh is crisp, juicy and sub-acid. August and September.

**Whitney.** Tree is a hardy, thrifty, upright grower; comes into bearing young and is very productive. Fruit is green, spotted with carmine. Flesh yellowish, crisp, juicy, splendid for eating and cider. August and September.

**Yellow Siberian.** Color of fruit is amber with red blush and of medium size. September.

### SUITABLE DISTANCES FOR PLANTING FRUIT TREES.

Apples, standard, 30 to 40 feet. Pears, standard, 18 to 20 feet. Peaches, 16 to 18 feet. Cherries, sweet, 18 to 20 feet. Cherries, sour, 15 to 18 feet. Plums, 16 to 20 feet. Quinces, 10 to 12 feet.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

## FRUIT TREES, Continued

### CHERRIES

#### HEART AND BIGARREAU (Sweet)

4 to 6 feet, first-class, each, **\$2.50**; per doz., **\$25.00**.

No home orchard is complete without some cherry trees. They are easily grown wherever the apple succeeds and they bear good crops yearly.

**Black Tartarian.** A beautiful purplish cherry of large size and superb quality, rich and juicy. Late June and July.

**Governor Wood.** One of the finest sweet cherries. Fruit is large, light red, juicy and delicious. Tree is healthy and productive. June.

**Napoleon.** Fruit of large size, white with red cheeks, firm and juicy. One of the best. Early July.

**Rockport Bigarreau.** Fruit large, round, light red, flesh firm and of fine flavor. Late June.

**Yellow Spanish.** A large handsome sweet cherry; yellow with light red cheek, firm and delicious. Late June.

#### DUKE AND MORELLO (Sour)

4 to 6 feet, first-class, each **\$2.50**; per doz., **\$25.00**.

**Dyehouse.** One of the earliest cherries. Similar to the Early Richmond but ripens about a week earlier and is much sweeter. The fruit is medium sized, soft, red and juicy. Tree is hardy and very productive. June.

**Early Richmond or May.** Unsurpassed for cooking. The tree is a free grower and reliable producer. The fruit is medium size, dark red, juicy and has an acid flavor. June.

**English Morello.** Fruit is large, dark red, nearly black, rich, juicy, with acid flavor. Tree is of dwarf growth. Late July.

**Windsor.** A large, delicious cherry; reddish-brown or liver colored. Valuable for late market or home use. July.

### MULBERRIES

4 to 6 feet, each, **\$1.00**; per doz., **\$10.00**.

**Downing's Everbearing.** One of the most prolific varieties, bearing an abundance of large, black, sub-acid fruits; hardy.

### PEARS

#### STANDARD AND DWARF

5 to 7 feet, first-class, each, **\$1.85**; per doz., **\$18.50**.

**Bartlett.** One of the most popular sorts, both for home and market. It is large, handsome, waxy yellow with red blush, flesh buttery, rich, juicy and highly flavored. August and September.

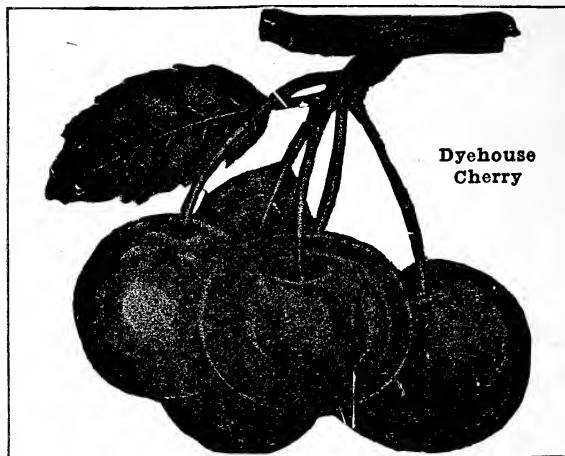
**Duchess D'Angouleme.** The skin is a dull greenish-yellow; flesh white, melting, juicy and well flavored. Tree is a vigorous grower. October and November.

**Flemish Beauty.** The fruit is large, the skin pale yellow; the flavor is sweet and melting. September and October.

**Kieffer's Hybrid.** Large, rich color and good quality. Fine for canning and preserving. October and November.

**Seckel.** Small, yellowish brown, of rich, delicious flavor, very popular for dessert. August and September.

**Sheldon.** Of the finest quality, rich and aromatic. Fruit is greenish russet with a red cheek, large size and somewhat flattened shape. September.



Dyehouse  
Cherry

### PEACHES

4 to 5 feet, each, **\$1.00**; per doz., **\$10.00**.

**I**f living on a farm, plant a small peach orchard for home use or a larger one for commercial purposes. If living on a city lot plant a peach tree in the back yard.

**Champion.** One of the finest freestone peaches. Large, creamy-white with slight blush. Flesh white, rich, sweet, juicy and of excellent flavor. August.

**Crawford's Early.** A very large, rich, yellow freestone of the finest quality. Late August.

**Crawford's Late.** This peach is similar to Crawford's Early, but ripens two or three weeks later. Freestone. Late September.

**Elberta.** The fruit is large with golden-yellow skin covered largely with crimson; flesh is yellow, firm, juicy and of high quality, very prolific. Freestone. September.

**Heath Cling.** Fruit very large, creamy white with faint blush. Flesh white to the stone, juicy and sweet with a good aroma. October.

**Old Mixon Free.** The standard late white peach. A large tender freestone with tender, excellent white flesh. September.

### PLUMS

#### STANDARD ON PLUM STOCKS

5 to 7 feet, each, **\$2.50**; per doz., **\$25.00**.

Plum trees require but little room to grow and are prolific bearers. For dessert, cooking and canning the demand is almost unlimited.

**Abundance.** Large, beautiful yellow, heavily overspread with purple-carmine. Flesh yellow, juicy, sweet, firm, with tough skin. July.

**Bradshaw.** Very large, dark violet red; flesh yellow, juicy and good. Tree an erect, vigorous grower. Middle of August.

**Burbank.** Fruit very large, color cherry red, mottled; flesh yellow, sweet and firm. Hardy and vigorous grower. August.

**Lombard.** A favorite for canning. Fruit is medium size, oval and violet red. Flesh is yellow, juicy, pleasant and good. Late August.

**Red June.** An early ripening plum of good quality. Fruit medium to large, purplish-red; flesh yellow, solid, juicy and of good quality. Early August.

**Shippers Pride.** Large, showy, dark purple fruit. The flesh is sweet and firm. September.

**Yellow Egg.** A beautiful yellow, egg-shaped plum of large size; flesh yellow. Excellent for canning. Late August.

### QUINCES

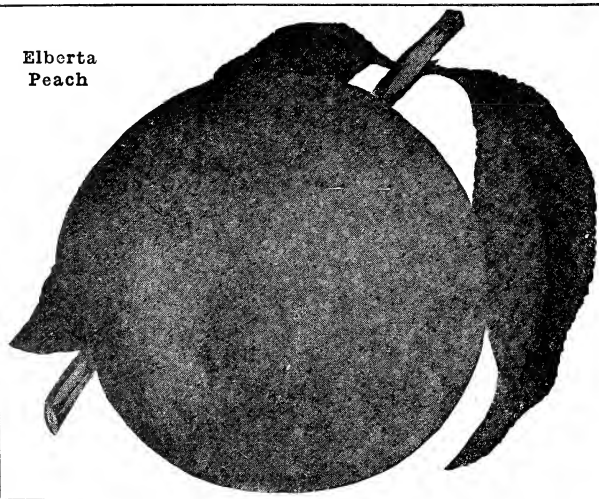
3 to 5 feet, each, **\$1.85**; per doz., **\$18.50**.

**Apple or Orange.** Large, round, bright golden yellow, cooks quite tender and has an excellent flavor. Valuable for preserving and for market. An abundant bearer.

**Champion.** The fruit is large, oval, of a rich color and excellent quality. Ripens late and keeps well until January.

**We do not guarantee or replace Trees or Shrubs at prices quoted.**

Elberta  
Peach



# BLACKBERRIES, CURRANTS, GOOSEBERRIES AND RASPBERRIES

By Express or Freight at Expense of Purchaser.

Impossible to Accept Orders for Small Fruits Totaling Less than One Dollar.

## BLACKBERRIES

Per dozen, \$1.00; per 100, \$6.00.

**THE** Blackberry is one of the most profitable fruits to grow when properly managed as it thrives well in almost any soil, but reaches perfection in a strong loam tending towards clay.

**Ancient Briton.** Large berries of fine quality.

**Blower.** Large berries. Very productive.

**Early Harvest.** Fruit, medium size. The first to ripen.

**Eldorado.** Large fruit, fine quality, good keeper.

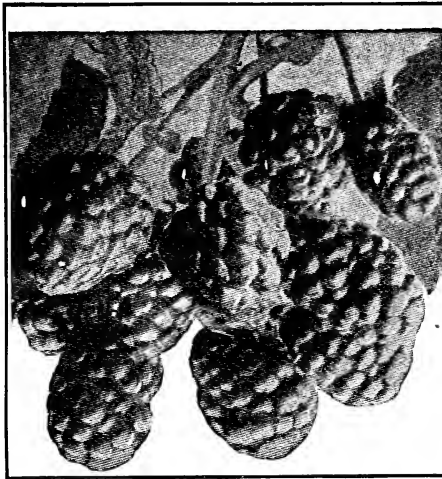
**Mersereau.** Berries large; good keeper and shipper.

**Rathbun.** Fruit very large, sweet and luscious.

**Snyder.** Medium size; sweet and juicy.

**Taylor.** Medium size fruit of fine flavor; ripens late.

**Ward.** Fine, large fruit of excellent quality, hardy.



## CURRANTS

Two-Year-Old Plants

**A** COOL, moist soil is best adapted to the growth of currants. They should be well cultivated and heavily mulched.

**Cherry.** Large, bright red berries, with a thin skin and fine flavor.

Each, 50c; per dozen, \$5.00.

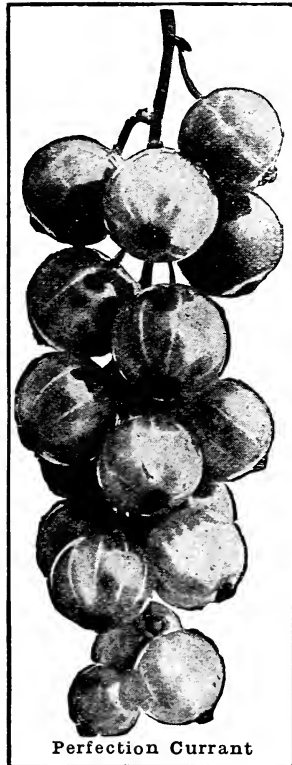
**Champion.** This is one of the best black currants; fruit is above medium size with fine flavor.

Each, 50c; per dozen, \$5.00.

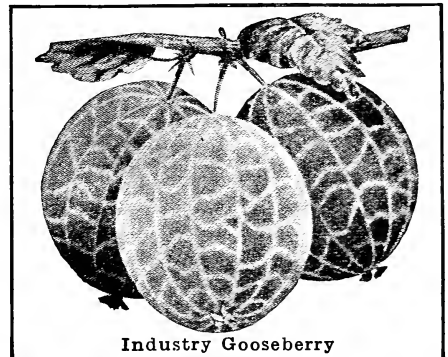
**Perfection.** Color of fruit is a beautiful bright red, of large size and a rich, mild, sub-acid flavor.

Each, 50c; per dozen, \$5.00.

**White Grape.** The golden-white berries are borne in large, handsome clusters and have a mild sub-acid flavor. Each, 50c; per dozen, \$5.00.



Perfection Currant

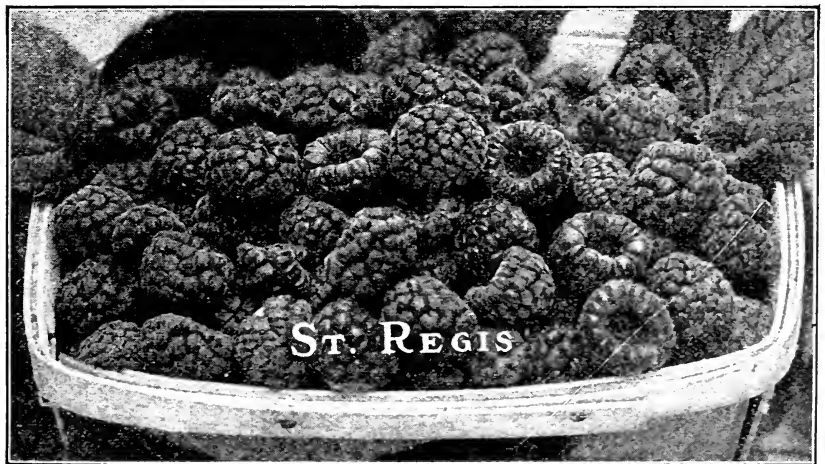


Industry Gooseberry

## RASPBERRIES

Once the raspberry patch is established it requires very little cultivation. They thrive in good, moist soil. Black caps should be planted in the spring.

**St. Regis.** It is wonderfully prolific, the first or main crop being far greater than that of any other red variety known. It fruits on the old canes in generous quantities until late in August. By that date, berries begin to ripen upon the young canes, which continue to produce berries in increasing numbers until severe frost. The berries are a bright crimson, of large size and surpassing quality—rich, sugary with full raspberry flavor. They are exceedingly meaty, of firm texture and keep in good condition longer after being gathered than any other red raspberry. Per dozen, \$1.00; Per 100, \$6.00.



ST. REGIS

## DEWBERRY

**Lucretia.** One of the low-growing, trailing blackberries. It has proved highly satisfactory wherever tried, and many say it is the best of all the blackberry family.

Per dozen, \$1.00; per 100, \$6.00.

## GOOSEBERRIES

Two-Year-Old Plants

**O**NE of the hardiest of the bush fruits. The best results are obtained by planting in moist clay loam.

**Downing.** Large, pale green and of splendid quality for both cooking and table use.

Each, 50c; per dozen, \$5.00.

**Houghton's.** Small to medium; roundish oval, pale red, sweet, tender.

Each, 50c; per dozen, \$5.00.

**Industry.** The best English variety yet introduced. Berries large, dark red color when ripe.

Each, 50c; per dozen, \$5.00.

**Smith's Improved.** Large, pale greenish yellow, skin thin, of excellent quality.

Each, 50c; per dozen, \$5.00.

The following varieties are all, per doz., \$1.00; per 100, \$6.00.

**Cardinal.** Considered one of the very best purple berries, as they produce a fine quality of dark red or almost purple berries through a long season.

**Cumberland.** The largest black cap.

**Cuthbert.** Large, firm, deep rich crimson.

**Gregg.** A large black cap variety, fruit firm.

**Kansas.** The hardiest black cap; strong, vigorous.



# STRAWBERRIES AND GRAPE VINES

By Express or Freight at Expense of Purchaser.  
Impossible to Accept Orders for Small Fruits Totaling Less than One Dollar.

## STRAWBERRIES

**S**TRAWBERRIES will do well in any soil that will grow good corn. Soil should be made fine and loose. A generous supply of well rotted manure incorporated in the soil is a great benefit.

Strawberries are naturally shallow-rooted plants and must be encouraged continually to send their roots deep, in order to be sure of a supply of moisture and to feed in a soil of even temperature.

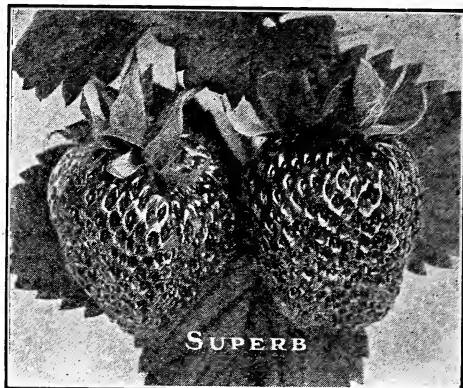
Plant in spring—always the best time—and see that no soil is allowed to remain in the crown of the plant.

Mulching strawberries is done to keep the soil moist and cool in summer, to protect the berries from mud and dirt when ripe and to protect the plants in winter. The winter protection should not be put on until the ground freezes.

Strawberries for garden culture should be planted in rows three feet apart and one foot apart in rows. For field culture plant in rows four feet apart and eighteen to twenty-four inches apart in row

**Dip the plants in water as soon as received, and bury the roots in moist, shady ground till you are ready to set them out.**

**Superb.** The Ever-bearing Strawberry—Superb is a truly wonderful, fall-bearing variety, and what makes it unusually profitable is the fact that it also produces a heavy yield of choice fruit in the early summer, along with the standard varieties. They continue to give large yields of choice berries throughout August, September and in October up to the time the ground is slightly frozen. Plants of this variety which are set in the spring should have the blossoms removed until the first of July. The blossoms may be left to develop into berries, and a good crop of fruit will thus be secured the same season the plants are set, without injury to the plants. . . . . Per dozen, **50c**; per 100, **\$3.00**.



The following varieties are all, per dozen, **50c**;  
per 100, **\$1.75**; per 1,000, **\$15.00**.

**Aroma.** One of the finest for long-distance shipping. The large berries are bright red to the center, of conical shape with prominent and attractive yellow seeds.

**Gandy.** One of the best late varieties. Berries large, of fine form and excellent quality.

**Glen Mary.** Large to very large, sometimes flattened; sweet and rich.

**Nick Ohmer.** A fine, fancy market berry and always superb for the table. A giant in size.

**Senator Dunlap.** Exceedingly vigorous. Fruit large, regular and attractive in form, deep red to the center.

**Wm. Belt.** Berries very large, conical, bright red; of good flavor. The plant is strong, healthy and fruitful.

## GRAPES

### ALL TWO-YEAR OLD SELECTED STOCK

This is one of the most satisfactory crops that can be grown, because it can be depended upon practically every year.

Grape vines will grow almost anywhere, but they should be carefully cultivated and pruned.

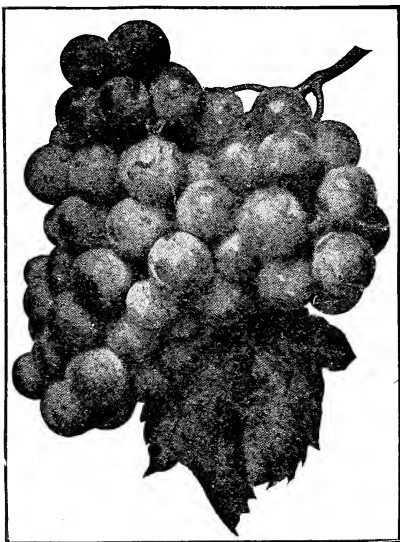
### BLACK OR PURPLE GRAPES

**\*Concord.** Large, black grape, hardy and productive; juicy and sweet. Each, **50c**; per doz., **\$5.00**.

**Ives' Seedling.** Dark purple, sweet. Each, **50c**; per dozen, **\$5.00**.

**Moore's Early.** Ripens ten days earlier than Concord; bunch and berry round and large. Each, **50c**; per dozen, **\$5.00**.

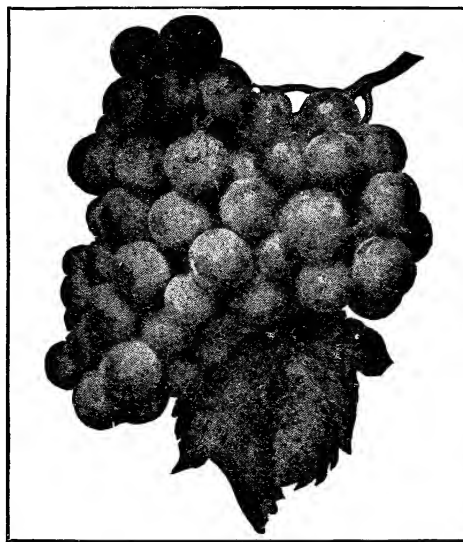
Varieties marked with a (\*) are best for arbors.



### RED GRAPES

**\*Catawba.** Berries large, round; when ripe a dark copper color; sweet, rich. . . . . Each, **50c**; per dozen, **\$5.00**.

**Delaware.** Small, light red, thin skin; very juicy, sweet, sprightly. . . . . Each, **60c**; per dozen, **\$6.00**.



### WHITE OR YELLOW GRAPES

**Niagara.** Bunch and berries large, light greenish white, slightly ambered. . . . . Each, **50c**; per dozen, **\$5.00**.

**Pocklington.** Bunch and berry very large; attractive, golden yellow color. . . . . Each, **50c**; per dozen, **\$5.00**.

## HUBBARD THE NEW BLACK GRAPE

Quality sweet and delicious, having that fine and pleasant flavor approaching the European or Vinifera Grapes. Berries and bunch large and uniform; ripens ten days earlier than Concord. Supply limited. Each, **\$1.50**; Per doz., **\$15.00**.

### SUITABLE DISTANCES FOR PLANTING SMALL FRUITS AND GRAPE VINES.

Blackberries, 5 to 7 feet. Currants, 3 to 4 feet. Gooseberries, 3 to 4 feet. Raspberries, red, 3 to 4 feet. Strawberries, black, 4 to 5 feet. Strawberries, 1 x 3½ feet. Strawberries, in beds 1½ x 1½ feet. Grapes, 8 to 10 feet.



# Shade and Ornamental Trees

FOR LAWN, STREET AND FOREST PLANTING

**ORNAMENTAL** shade trees play an important part in the arrangement of all lawns and parks. They are often invaluable as windbreaks, supply shade, and help retain the moisture—conditions that are essential to the growth of many of the choicest shrubs and perennials.

There are trees noteworthy for their profusion of bloom; some for the unusual color of bark or leaves; and some for the strength of their limbs. Some trees will endure smoke much better than others, making them valuable for city planting.

For many years we have given especial attention to ornamental shade trees, and are confident of our ability to please the most critical buyer. We have the largest variety of this class of stock to be found in this part of the State.

**ASH. American White.** A handsome, hardy, broad-headed, quick growing shade tree. Valuable for park and street planting. 6 to 8 feet. . . . . Each, **\$2.00**; per dozen, **\$20.00**.

**ASH. European.** Smaller in its habit of growth and more spreading than the American. 6 to 8 feet.  
Each, **\$1.50**; per dozen, **\$15.00**.

**BIRCH. European White.** This is a valuable species with white bark. Very effective in landscape work. 5 to 7 feet.  
Each, **\$2.25**; per dozen, **\$22.50**.

**CATALPA SPECIOSA.** A handsome, rapid growing tree, with large, bright green foliage. Valuable for lawn and street planting. 8 to 10 feet. . . . . Each, **\$2.25**; per dozen, **\$22.50**.

**CATALPA BUNGEI.** (Umbrella Catalpa.) See "Ornamental Trees," page 35, for description.  
6 to 7 ft., ea., **\$2.25**; selected two year old, ea., **\$3.00**.

**ELM. American.** A valuable tree for park, avenue and lawn planting. A hardy, rapid grower; resists drought well and is long lived. 8 to 10 feet.  
Each, **\$1.50**; per dozen, **\$15.00**.

**LINDEN. American.** A rapid growing tree with large leaves and fragrant flowers. Extensively used as a lawn tree, also for park and street planting. 8 to 10 feet.  
Each, **\$2.75**; per dozen, **\$27.50**.

**LINDEN. European.** This is the broad-leaved linden of European plantations and probably the largest.  
8 to 10 feet. . . . . Each, **\$2.75**; per dozen, **\$27.50**.

**LIQUIDAMBER.** (Sweet Gum.) A very ornamental tree and beautiful at every stage. Splendidly adapted for street and park planting. 5 to 6 feet.  
Each, **\$2.25**; per dozen, **\$22.50**.

**MAPLE. Norway.** A large, handsome tree with a compact, rounded head of spreading branches. One of the best trees for lawn, park, street or cemetery planting. 8 to 10 feet. . . . . Each, **\$3.00**; per dozen, **\$30.00**.

**MAPLE. Rock or Sugar.** An excellent shade tree of upright, dense growth. Grows to a large size and is long lived. 6 to 8 feet. . . Each, **\$2.25**; per dozen, **\$22.50**.

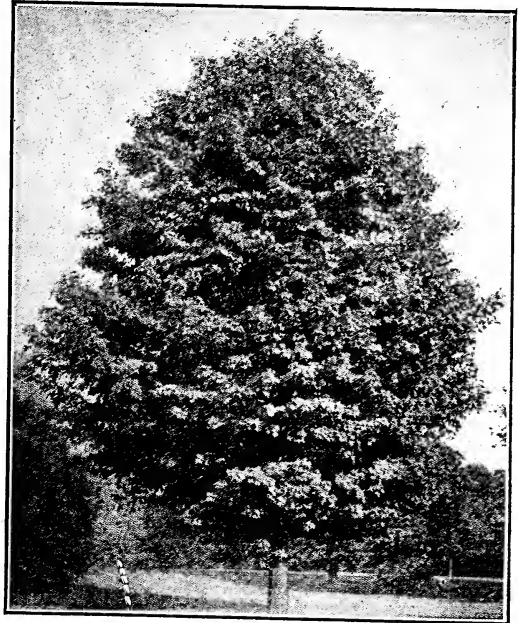
**MAPLE. Silver or Soft.** This is an ornamental tree with wide, slender, spreading branches and thrives almost anywhere. 8 to 10 feet. . Each, **\$1.75**; per dozen, **\$17.50**.

**MAPLE. Japanese.** See "Ornamental Trees" Page 35.

**OAK. Red.** A beautiful tree of rapid growth, growing into a large, majestic tree, with broad, round head, the foliage turning dark red in fall. 6 to 8 feet.  
Each, **\$2.50**; per dozen, **\$25.00**.

**OAK. Scarlet.** A noble tree with gradually spreading branches, which form a rather open head. Leaves turn scarlet in fall. 6 to 8 feet.  
Each, **\$2.50**; per dozen, **\$25.00**.

**OAK. Pin.** A handsome tree, especially when young. Tree is fibrous rooted, transplants well and grows rapidly. Foliage turns bright red in fall. 6 to 8 feet.  
Each, **\$2.50**; per dozen, **\$25.00**.



Sugar Maple

**POPLAR. Carolina.** One of the surest and most rapid growing trees. The leaves are glossy and fresh looking. Valuable for quick effects. 10 to 12 feet.  
Each, **\$1.75**; per dozen, **\$17.50**.

**POPLAR. Bolleana.** Its habit of growth is broader than the Lombardy. Tall growing with cottony leaves. 8 to 10 feet. . . . . Each, **\$1.75**; per dozen, **\$17.50**.

**POPLAR. Lombardy.** This is an excellent tree for landscapes because with age it becomes striking and picturesque. 8 to 10 feet.  
Each, **\$1.75**; per dozen, **\$17.50**.

**SALISBURIA.** (Maiden Hair or Ginkgo.) A tall, sparsely branched, usually slender tree, with leaves similar in shape to the Maiden Hair Fern. Especially valuable for solitary planting to secure picturesque effects. 6 to 8 feet. . . . . Each, **\$2.75**; per dozen, **\$27.50**.

**SYCAMORE. Platanus Orientalis.** (Oriental Plane.) This is among our largest and tallest growing trees. Very hardy and does well in moist places. Excellent for street, park and lawn planting. Thrives well in smoky cities, making it a good tree for city planting. 8 to 10 feet. . . . . Each, **\$2.00**; per dozen, **\$20.00**.

**SYCAMORE. Platanus Occidentalis.** (American Sycamore, Buttonwood.) Similar to the Oriental Sycamore in general habit of growth, but more susceptible as to location and sheds its leaves earlier in the fall. 6 to 8 feet. . . . . Each, **\$1.75**; per dozen, **\$17.50**.

**TULIP TREE.** (Liriodendron Tulipifera.) A tall, handsome, hardy, ornamental tree of pyramidal habit and rapid growth. Bears numerous tulip-shaped, fragrant flowers of a creamy yellow and orange color in June. 6 to 8 feet. . . . . Each, **\$1.75**; per dozen, **\$17.50**.

## WEeping TREES

**BIRCH.** (Cut-leaf Weeping.) A tree of wonderful grace and beauty. Tall, slender, drooping branches and delicately cut leaves. It colors brilliantly in the fall. Its bare white trunk and branches make a beautiful winter picture. 6 to 8 feet.  
Each, **\$2.50**; per dozen, **\$25.00**.

**MULBERRY. Teas Weeping.** See "Ornamental Trees," page 35.

When wanting Shade or Ornamental Trees not listed here, write us, as we can usually supply in limited quantities several other varieties.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

# Evergreen Trees

ON account of the large demand for Evergreens we have made arrangements with one of the best Evergreen specialists in the country, whereby we are able to offer the following list of Evergreens. These are largely American stock and the quality will be the best that can now be supplied. We have tried to make prices as reasonable as possible and if you contemplate further plantings, would advise placing your order at once while stocks are still fairly complete.

All of our Evergreens are dug with a ball of earth around the roots and burlapped. This protects them in transit and this fact should be borne in mind by purchasers when comparing prices.

## ARBORVITAE AMERICAN (Thuya Occidentalis)

Well known screen and hedge plant. 2 to 3 feet, each, **\$1.50**; per dozen, **\$15.00**; 3 to 4 feet, each, **\$2.00**; per dozen, **\$20.00**.

## ARBORVITAE ELWANGERIANA

Low, broad pyramid with slender branches and yellowish foliage. 1 to 1½ feet, each, **\$2.00**; per dozen, **\$20.00**. 1½ to 2 feet, each, **\$2.25**; per dozen, **\$22.50**.

## ARBORVITAE GLOBE (Thuya Occidentalis Globosa)

Very dwarf and compact; grows naturally into a rounded, almost ball-like form. 1 to 1½ feet, each, **\$2.25**; per dozen, **\$22.50**.

## ARBORVITAE LUTEA (Geo. Peabody)

A handsome and desirable variety of the Golden Arborvitae. 2 to 3 feet, each **\$5.00**; per dozen, **\$50.00**.

## ARBORVITAE PYRAMIDALIS (Thuya Occidentalis Pyramidalis)

Suitable for tubs and possesses foliage of finer texture and more dense habit than the American Arborvitae. 2 to 3 feet, each, **\$2.75**; per dozen, **\$27.50**; 3 to 4 feet each, **\$3.25**; per dozen, **\$32.50**.

## ARBORVITAE SIBERIAN (Var. Wareana)

Of dwarf habit and conical outline. Rich, dark green foliage. Will withstand colder exposure than other sorts. 1½ to 2 feet, each, **\$2.25**; per dozen, **\$22.50**.

## ARBORVITAE TOM THUMB

Smaller and more compact than the variety Ericoides. Suitable for low hedges. 1 to 1½ feet, each, **\$2.25**; per dozen, **\$22.50**.

## FIR CONCOLOR (Colorado Silver Fir)

Grows in symmetrical pyramidal form, with long, feathery foliage, of silvery-green color, which curves upwards. 2 to 3 feet, each, **\$4.75**; per dozen, **\$47.50**.

## IRISH JUNIPER (Juniperus Hibernica)

Grows erect in a dense column of dark green. 2 to 3 feet, each, **\$2.25**; per dozen, **\$22.50**.

## JUNIPER JAPONICA AUREA (Golden Japanese Juniper)

Of erect conical habit with golden foliage. 2 to 2½ feet, each, **\$5.00**; per dozen, **\$50.00**.

## JUNIPER PFITZERI

Of good form with graceful, dark green foliage. 2 to 3 feet, each, **\$4.25**; per dozen, **\$42.50**.

## JUNIPER SCHOTTII

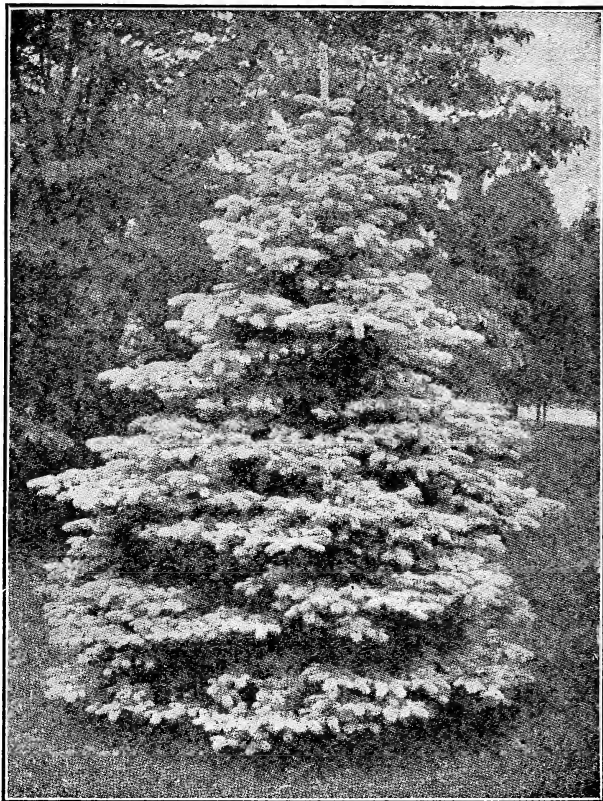
A dwarf, dense, pyramidal form with bright green and light foliage. 2 to 3 feet, each, **\$5.00**; per dozen, **\$50.00**.

## JUNIPER VIRGINIANA GLAUCA

A vigorous growing form of the Junipers, with glaucous foliage. 3 to 4 feet, each, **\$5.00**; per dozen, **\$50.00**.

## JUNIPER VIRGINIANA (Red Cedar)

This evergreen attains a height of one hundred feet, with conical head and spreading or upright branches. The leaves are spiny pointed. 3 to 4 feet, each, **\$2.75**; per dozen, **\$27.50**.



Koster's Blue Spruce

## AUSTRIAN PINE (Pinus Austriaca)

A tall tree with spreading branches, heavily plumed with long, stiff needles. 2 to 3 feet, each, **\$1.75**; per dozen, **\$17.50**.

## DWARF MUGHO PINE (Mughus)

Usually broader than its height and sometimes almost prostrate. Forms a dark, dome-shaped bush. 15 to 18 inches, each, **\$2.75**; per dozen, **\$27.50**.

## SCOTCH PINE (Pinus Sylvestris)

A strong grower with spreading branches and short, stiff needles. 2 to 3 feet, each, **\$1.75**; per dozen, **\$17.50**.

## WHITE PINE (Pinus Strobus)

A beautiful ornamental tree, also used for shade and shelter belts. 3 to 4 feet, each, **\$2.50**; per dozen, **\$25.00**.

## RETINOSPORA PLUMOSA (Plume Cypress)

Light green, feathery foliage. It stands shearing well. 2 to 3 feet, each, **\$4.25**; per dozen, **\$42.50**.

## RETINOSPORA PISIFERA AUREA

Golden evergreen, light airy foliage. 2 to 3 feet, each, **\$4.25**; per dozen, **\$42.50**.

## COLORADO BLUE SPRUCE (Picea Pungens,

The original form of the Colorado spruce, foliage light green, very hardy. 1½ to 2 feet, each, **\$4.25**; per dozen, **\$42.50**; 2 to 3 feet, each, **\$5.00**; per dozen, **\$50.00**.

## KOSTER'S BLUE SPRUCE

(Picea Pungens Glauca Kosteriana)

The finest ornamental Evergreen grown. The foliage is the purest blue. Our stock of this variety is probably the largest and finest in America. 2 to 3 feet, each, **\$8.50**; per dozen, **\$85.00**; 4 to 5 feet, each, **\$16.50**; per doz., **\$165.00**.

## NORWAY SPRUCE (Picea Excelsa)

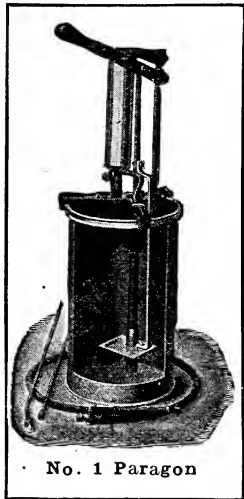
A vigorous, rapid growing tree, with dark-green foliage. One of the most popular Evergreen trees. 1½ to 2 feet, each, **\$1.00**; per dozen, **\$10.00**; 2 to 3 feet, each, **\$1.50**; per dozen, **\$15.00**; 3 to 4 feet, each, **\$1.75**; per dozen, **\$17.50**.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

# Spraying Pumps and Appliances

**SPRAYING** is of such importance that the Experiment Stations all over this country have given much of their attention to it, and their findings have been of incalculable value. Diseases and insects can no longer exist if the proper Insecticides are applied through the medium of an up-to-date spray apparatus.

## PARAGON SPRAYERS



No. 1 Paragon

**THESE** Sprayers are strongly constructed and can be easily operated by one man. Our patented, self-cleaning strainer prevents the necessity of first straining the liquid to be sprayed. The agitator also keeps the liquid thoroughly stirred. The spray nozzle has only  $\frac{1}{8}$ -inch outlet and spreads the liquid well. All parts of the machine are made of the best material obtainable.

The reservoir is made of heavy galvanized iron. All essential fittings and valves are made of brass, making it strong and durable. The body of pump is cast iron, well ribbed, to prevent breakage. The screen is of heavy perforated brass and will last many years. The pump frame can easily be removed from tank when it needs cleaning and by running water through machine after using, the entire machinery can be easily and thoroughly cleaned. Suitable for spraying Insecticides and Fungicides on trees, shrubs and vines, as well as the application of Whitewash and Cold Water Paints.

### Price List of Paragon Sprayers

- No. 0.** Capacity,  $3\frac{1}{2}$  gallons. Equipment, 4 feet spray hose, 3 feet spray pipe, 1 mist spray nozzle, 1 steel cap for mist nozzle, 1 straight spray. Price..... **\$15.00.**
- No. 1.** Capacity, 6 gallons. Equipment, 5 feet 6-ply hose, 5 feet spray pipe, two spray nozzles. Price..... **\$20.00.**
- No. 3.** Capacity, 12 gallons. Equipment, 10 feet 6-ply hose,  $7\frac{1}{2}$  feet spray pipe, two spray nozzles. Mounted on strong steel truck and can easily be wheeled to any desired place. Truck is easily detached when desired. Price..... **\$30.00.**

- No. 3.** Machine without truck. Price., **\$26.00.**
- No. 4.** Capacity, 28 gallons. Equipment, 20 feet 6-ply hose, 10 feet spray pipe, two spray nozzles. Mounted on two strong 30-inch wheels. Price..... **\$44.00.**
- No. 4.** Machine without wheels. Price **\$34.00.**
- No. 5.** Capacity, 50 gallons. Equipment, 25 feet 6-ply hose, 10 feet spray pipe, one 3-way spray nozzle, one single spray nozzle. This sprayer has solid cast brass pump and large air chamber. It is positively the very best hand power sprayer made for tree spraying. Price... **\$50.00.**

Send for descriptive circular giving detailed information.

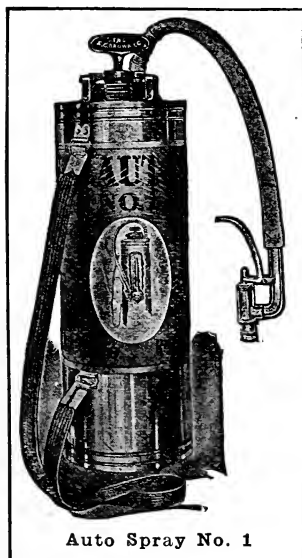


### Bamboo Brass Lined Spray Poles

- 12-foot lengths..... net price, **\$5.00**  
10-foot lengths..... net price, **4.75**

## MYER'S SPRAY PUMPS

- Myer's Lever Bucket Brass Spray Pump.** Complete with hose and graduating Vermorel fine, coarse spray and solid stream nozzle..... **\$6.00.**
- Myer's Defiance Brass Spray Pump.** Complete with hose and graduating Vermorel fine, coarse spray and solid stream nozzle..... **\$5.50.**
- Myer's Little Giant Brass Spray Pump.** Complete with hose and imperial combination, fine, coarse spray and solid stream nozzle..... **\$4.50.**
- Four-foot Pipe Extension.**..... **50c.**
- Bordeaux Nozzle.**..... **\$1.00.**
- Vermorel Nozzle.**..... **90c.**



Auto Spray No. 1

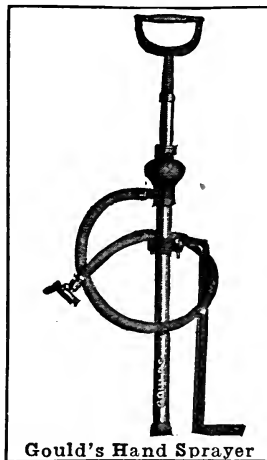
### Auto Compressed Air Spray

Can be suspended from the shoulder, allowing the free use of the arms. A few strokes of plunger in air chamber will compress enough air to discharge the entire contents. A practical machine for potatoes, tobacco, small fruits, vineyards, poultry houses, green houses, etc. Extension pipes for spraying trees.

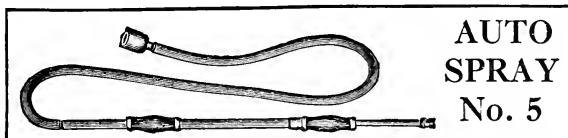
- Auto Spray No. 1-B.** Brass tank, with Auto-Pop Nozzle... **\$11.50.**
- Auto Spray No. 1-D.** Galvanized tank, with AutoPop Nozzle, **\$8.00.**
- Brass Extension.** Two feet, per length... **60c.**
- Elbow.**..... **30c.**

## GOULD'S "BORDEAUX" HAND SPRAYER

**THE "Bordeaux"** is a brass pump for garden or green-house work. It is fitted with brass ball-valves which are proof against the action of acids or oils. The discharge hose is attached to the pump by a brass coupling. No suction hose is needed, as the pump rests in the pail with the malleable iron foothold outside. Equipped with 3 feet of  $\frac{3}{8}$ -inch discharge hose and "Seneca" nozzle. Price..... **\$5.00.**



Gould's Hand Sprayer



AUTO SPRAY No. 5

**THE** pump is made entirely of brass. It has two ball valves so arranged that they may be instantly cleaned. The threads are all cut, not rolled, so that there is no chance for leakage. Pump is double acting and will generate a pressure of 180 lbs.

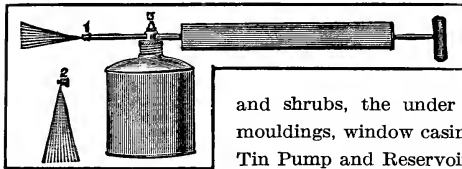
We furnish with this pump  $3\frac{1}{2}$  ft. of  $\frac{3}{8}$  in. suction hose and a heavy strainer that keeps the hose from working out of a bucket or tank.

The extension is extra and is very useful for spraying field crops. The extension is curved so that the operator can direct the spray up or down while using the pump in a horizontal position. Extension can be used on any of the Auto-Sprayers.

- Auto-Spray No. 5.** Pump, hose, nozzle and strainer, complete..... **\$5.00.**
- Brass Extension, extra., **60c.** Elbow, extra..... **30c.**

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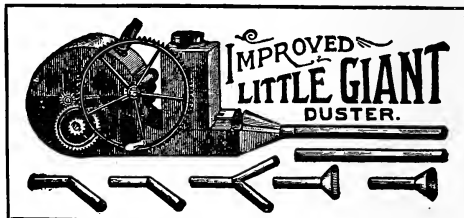
## SPRAYERS, POWDER DUSTERS, Etc.—Continued



### THE ROBERTSON COMPRESSED AIR SPRAYER

They give a continuous spray. By means of the universal nozzle the spray can be thrown on the under side of the leaves of plants and shrubs, the under side of beds and other furniture, into corners, behind doors, on top of mouldings, window casings, behind steam pipes, and other difficult places. Capacity, one quart. Tin Pump and Reservoir, each, **75c.** Brass Pump and Reservoir, each, **\$1.50.**

- MIDGET ATOMIZER.** A small, compact Tin Sprayer. Tank 3 inches in diameter, 3 inches deep. Capacity, 1 pint. Price, each, ..... **35c**
- ACME FOG ATOMIZER.** Strong, durable and satisfactory. Price, each, ..... **50c**
- WOODASON'S POWDER BELLOWS.** Single cone; small, **\$2.50**; Single cone, large, **\$3.50.**
- LITTLE GIANT DRY POWDER DUSTER.** For Farm, Garden, Vineyard, Tobacco Fields, etc. Machine weighs about six pounds; furnished with three tubes, five nozzles and strap. Distributes any dry powder. Price, each, ..... **\$12.00**
- All Prices Subject to Market Changes.



# Insecticides and Fungicides

Liquid Insecticides and Poisons cannot be sent by mail.

**ANT ERADICATOR.** Useful against ants in lawns, gardens, etc. 8 oz. can, **25c.**

**BLACK LEAF 40.** Soft-bodied, sucking insects may be effectively controlled by spraying with "Black Leaf 40". This is a contact remedy. 1 oz. bottle, **25c**; ½ lb. tin, **\$1.00**; 2 lb. tin, **\$3.25**; 10 lb. tin, **\$13.75.**

**BUG DEATH.** Will not injure any Plant, Tree or Vine. Especially valuable for Cucumbers, Egg Plants, Melons, Rose Bushes, Currants and Potatoes. It drives ants from lawns, and won't injure the grass. Full directions on each package. 1 lb., **20c**; 3 lbs., **45c**; 5 lbs., **70c**; 12 ½ lbs., **\$1.40.**

**ZENKE'S LIQUID FUNGICIDE.** A powerful, reliable remedy for Leaf Spot, Leaf Rust, Scab, Mildew, Black and Brown Rot and most other Fungoid troubles. Per gallon, **\$3.25.**

(Sufficient to make 50 gallons of solution.)

**FISH OIL SOAP.** For destroying insects on Plants, Trees, Vines, etc. This is also a contact remedy. ½ lb., **20c**; 1 lb., **30c**; 5 lbs., **\$1.25**; in bulk, 25 lbs., **\$5.50.**

**GRAPE DUST.** A non-poisonous powder for the remedy and control of mildew and rot on grapes, Goose-berries, Roses, etc. 1 lb., **25c**; 5 lbs., **\$1.00**; 10 lbs., **\$1.75.**

**LIME SULPHUR SOLUTION.** For Fall, Winter and early Spring spray. Destroys San Jose Scale, Peach Leaf Curl, Bud Moth, Apple Aphid, Blister Mite, any Scale Insects or Bark Lice. 1 qt., **40c**; ½ gal., **65c**; 1 gal., **\$1.00**; 5 gals., **\$3.50.**

**S. W. DRY LIME-SULPHUR.** Is a combination of Lime and Sulphur which can be used not only as a dormant spray but also as a summer spray in combination with Arsenate of Lead. 1 lb. can, **40c**; 5 lb. can, **\$1.75**; 10 lb. can, **\$3.00**; 25 lb. can, **\$6.00.**

**NICO-FUME LIQUID.** For destroying Aphid, Thrip and Red Spider. Contains 40 per cent nicotine. This is a contact remedy. ¼ lb., **65c**; 1 lb., **\$2.00**; 4 lbs., **\$7.50**; 8 lbs., **\$14.50.**

**NICO-FUME PAPER.** Strips of paper strongly saturated with nicotine. These, when suspended and lighted, make one of the best and simplest methods of fumigating greenhouses. Price, air-tight cans, 24 sheets, **\$1.25**; 144 sheets, **\$5.00**; 288 sheets, **\$9.50.**

**ZENKE'S COMPOUND PLANT INSECTICIDE.** Is a contact remedy (Liquid). Very effective against Plant Lice, Black and White Fly, Mealy Bugs, Scale Insects, Eggs and Larva.

A very effective wash for Palms and Rubber Plants.

8 oz. can, **25c**; per gallon, **\$2.00.** (One gallon is sufficient to make 20 to 35 gallons of solution.)

**SLUG SHOT** Very effectual in destroying Caterpillars, Currant, Gooseberry and Cabbage Worms, Potato, Melon, Squash and Cucumber Bugs, Rose Slugs, Rose Lice, etc. 1 lb. carton, **20c**; 5 lbs., **60c**; 10 lbs., **\$1.15.**

**SCALECIDE.** An asphaltum base petroleum oil from which the light inflammable and heavy lubricating oils have been removed, but leaving the natural sulphur in the oil, combined with sulphonated vegetable oils and naphthalene, and chemically treated to make it soluble or water-miscible. It mixes instantly with water and stays mixed.

Add one gallon of "Scalecide" to 15 gallons of water, stir, and you are ready to spray any kind of tree when the leaves are off, provided it is not too cold to be comfortable.

Use a fine spray nozzle and thoroughly wet the tree from the topmost twig down to the ground and around the base of the tree and you can rest assured that you will have accomplished everything you could with any other dormant spray or combination of sprays, and in addition, some things they cannot do.

If used according to directions, will kill every San Jose scale that comes in contact with it.

1 qt., **70c**; 1 gal., **\$1.75**; 5 gals., **\$6.00**; 10 gals., **\$11.00**; 30 gals., **\$29.00**; 50 gals., **\$43.50.**

**SULPHUR, POWDERED.** Used to prevent and cure mildew on plants. 1 lb., **15c**; 2 lbs., **25c**; 5 lbs., **50c**; 10 lbs., **90c.**

**SULPHO-TOBACCO SOAP.** Destroys Black and Green Aphid, Mealy Bug, Red Spider, etc., on Plants, Shrubs and Trees. This is a contact remedy. 3 oz. cake **10c**; (by mail, **15c**); 8 oz. cake, **20c**; (by mail, **25c.**)

**TOBACCO DUST.** A sure remedy for Green Fly, Aphid, Fleas, Beetles, etc. 1 lb., **10c**; 5 lbs., **35c**; 100 lbs., **\$3.00.**

**TOBACCO DUST FOR FUMIGATING.** 1 lb., **10c**; 3 lbs., **25c**; 10 lbs., **60c**; 25 lbs., **\$1.25**; 100 lbs., **\$4.00.**

**TOBACCO STEMS.** Used for fumigating plants to kill insects, and as a mulch for roses, asters, lettuce, etc. 1 lb., **5c**; bale of about 125 lbs., **\$2.00.**

## MOSS, PEAT, ETC.

**MOSS, GREEN SHEET.** For hanging baskets, etc. Per lb., **40c**; large bag, **\$2.00.**

**MOSS, SPHAGNUM.** For packing plants and growing Orchids, etc. Per lb., **15c**; per bale, **\$2.50.**

**PEAT, JERSEY.** Rotted. Per peck, **40c**; per bu., **\$1.50.**

**POTTING SOIL.** This is a mixture especially prepared by us, and such as used at our greenhouses. It is suitable for all ordinary plants and bulbs. Peck, **35c**; bu., **\$1.25.**

### PREPARED BULB FIBRE

Growing bulbs, such as Roman Hyacinths, Dutch Hyacinths, Tulips and Narcissus in special prepared fibre has proven a great success; we strongly recommend our customers to try a few of the various bulbs in this way. The bulbs are potted the same way as in ordinary soil, just showing their tops. Do not press the fibre tightly, otherwise the roots do not work freely. Once potted, they require hardly any attention, only care must be taken to keep the compost moist, but not too wet. Peck, **50c**; bushel, **\$1.75.**

# Horticultural Tools and Sundries

**CANES.** Six to eight feet long, for plant stakes; per 100.....**\$1.75**

**CANES.** Japanese, green dyed, 3 feet long; per 100.....**\$1.75**

**GLASS CUTTER, ECLIPSE.** The best cheap cutter on the market. Each, **15c**; per dozen.....**\$1.50**

**GLAZING POINTS, PEERLESS.** Will stop your glass from sliding, made of galvanized steel wire:



Per 1,000

No. 1. For small single-thick glass.....**75c**

No. 2. For large single-thick glass.....**75c**

No. 2½. For double-thick glass.....**75c**

**GLAZING POINTS, ZINC CITY.**

Effective on large or small glass; easy to drive, easy to extract.



Per lb.....**.60c**

**KNIVES, PRUNING, \$1.25 to \$2.00**

**KNIVES, BUDDING, \$1.00 to \$1.75**

**KNIVES, ASPARAGUS, American 40c**

**LABELS, WOOD.** For pots, painted. per 100 per 1000

4 x ⅝-inch.....**\$0.25** **\$ 2.00**

5 x ⅝-inch.....**.30** **2.50**

6 x ⅝-inch.....**.40** **3.00**

8 x ⅝-inch.....**1.00** **8.50**

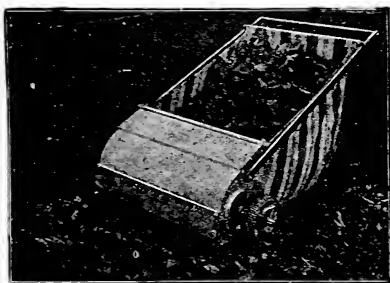
10 x ⅝-inch.....**1.25** **11.00**

12 x 1 ⅝-inch.....**1.50** **13.50**

**LABELS.** Tree, notched, copper wired; per 100, **40c**; per 1,000 **\$3.00**.

**LABELS.** Tree, copper, No. 1; per 100, **\$2.00**; No. 2, per 100, **\$2.50**

## LAWN CLEANER PENNSYLVANIA



This machine will clean your lawn more thoroughly and quicker than three or four men can do it with hand rakes, and greatly benefit the turf.

In the Autumn it takes up the heaviest fall of leaves. It is made of metal, wood and canvas, and is put together in the most durable and thorough manner. Price.....**\$32.50**

**LAMP, DEFIANCE FUMIGATING.** (For use in greenhouses.)

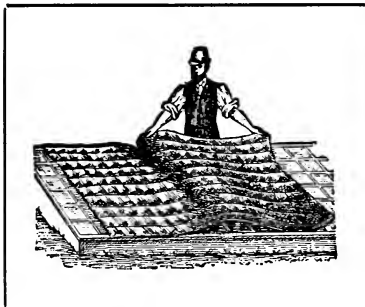
It burns kerosene. Used by prominent Market Gardeners all over the country.

Each, **65c**; per dozen, **\$6.75**.

**MASTICA.** For glazing green-houses. One gallon will cover about 300 running feet (one side).

One gallon.....**\$2.90**.

**MASTICA GLAZING MACHINE.** **\$2.90**.



**MATS, HOTBED—Strong Burlap.** Indestructible and warm. Size, 76 x 76 inches.....**\$3.75**

**MATTOCK, LONG CUTTER.** With handle.....**\$1.75**

**MATTOCK, CRONK'S GARDEN.....90c**

**PLANT BED CLOTH.** A substitute for glass, answering many uses equally well:

Light Grade, per yard.....**15c**

Heavy Grade, per yard.....**40c**

Write for special prices on large lots.

**PRUNING KNIVES, TREE—Kansas Improved.**

Price.....**\$3.00**

**PRUNING KNIVES, TREE—Happy Thought.**

Price, 6 ft.....**\$1.50**

8 ft.....**\$1.75**

10 ft.....**\$2.00**

**PRUNING KNIVES, TREE—Detroit.**

Price, 6 ft.....**\$1.50**

8 ft.....**\$1.75**

**PRUNERS, LITTLE GIANT TREE.** To use on a pole.

Price.....**\$1.00**

**PRUNING SHEARS, CLYDE.**

No. 1.....**\$2.75**

No. 2.....**2.50**

**PRUNING SHEARS, HAND**

California Pattern. 9-inch.....**\$1.00**

Wiss Heavy. Fine quality, 9-in.....**\$3.00**

Ladies' Hand.....**\$1.50**

**PUTTY, PEERLESS BLACK GLAZING.** For glazing greenhouses.

Remains flexible and pliable for years. Gallon.....**\$1.75**

**PUTTY, TWEMLOW'S LIQUID GLAZING.** For bedding glass in sash. One gallon will cover about 600 running feet (one side).

Gallon.....**\$3.25**

**PUTTY BULB.** A useful tool for applying liquid putty and glazing greenhouses.....**\$1.25**

**RAFFIA, NATURAL.** The best tying material for plants, also used for making hats, baskets, etc.

Per lb., **50c**; 5 lbs., **\$2.00**

**RAFFIA, COLORED.** For making baskets and fancy work in following colors: Black, Orange, Pink, Red and Yellow.

1 oz., **15c**; 1 lb., **\$1.25**

**SASH, HOTBED, UNGLAZED.**

Made from strictly clear cypress lumber. White lead used on the tendons, and iron dowel pins at the corners:

No. 1. 3x6 ft., three rows, 10-inch glass. Each, **\$4.00**; dozen, **\$45.00**

**SAWS, PRUNING.** 16-inch.....**90c**

18-inch.....**\$1.00**

**SAWS, PRUNING.** Double edge. **\$1.00**

**SAWS, PRUNING, Disston.....\$2.00**

**SEED SOWER, LITTLE GIANT.**

For sowing wheat, oats, rye, flax, grass seed, clover seed, etc.: in fact any kind of seed broadcast. It weighs but three pounds.....**\$2.25**

**SPRINKLER, RUBBER, SCOL-LAY'S.** Indispensable for floral work and window gardening. Large size.....**\$1.25**

**THERMOMETERS.**

Hotbed or Mushroom.....**\$2.50**

**WATERING POTS, GALVANIZED.**

Made from best quality of iron, and heavily galvanized. Two roses with each pot for fine and coarse watering.

Long Spout, 4 quart, **\$3.25**; 6 quart,

**\$3.50**; 8 quart, **\$3.75**; 10 quart,

**\$4.00**; 12 quart, **\$4.50**.

**WAX, GRAFTING.** ¼ lb., **15c**; ½ lb., **20c**; 1 lb., **30c**.

**WIRE FOLDING PLANT STANDS.**

The construction of the shelves or trays is such that there is more room for the pots and foliage than any other plant stand that takes the same amount of room on the floor.

3-Tray Wire Stand—Trays 7 ½ inches wide x 30 inches long.....**\$3.75**

2-Tray Wire Stand—Trays 7 ½ inches wide x 30 inches long.....**\$2.75**

1-Tray Wire Stand—Tray 10 inches wide x 24 inches long.....**\$1.75**

**WIRE WINDOW SHELF FOR PLANTS.** Strong, compact, with adjustable steel brackets; can be applied to any window moulding on flat part of same. Brackets are constructed so as to allow for curtains between window and plants.

36-inch Shelf, by 7 ½ inches wide, with Brackets complete.....**\$1.25**

42-inch shelf, by 7 ½ inches wide, with Brackets complete.....**\$1.50**

Lack of space prevents us listing all the Horticultural Tools and Sundries we carry—but will be pleased to supply any equipment needed at current prices.

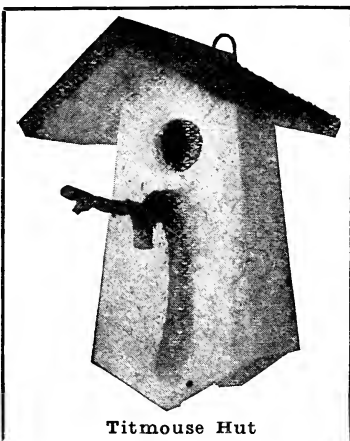




## STUCCO BIRD HOUSES

**T**HE birds which nest and harbor in cavities and hollows are in most instances the most valuable of our native birds, which love the vicinity of man, seemingly not only to delight him with chirp and song, but are the most diligent to keep plant life free from parasites and devouring insects.

Our model hutlets and cabins which we provide for these charming entertainers are appreciated by all bird lovers.



Titmouse Hut

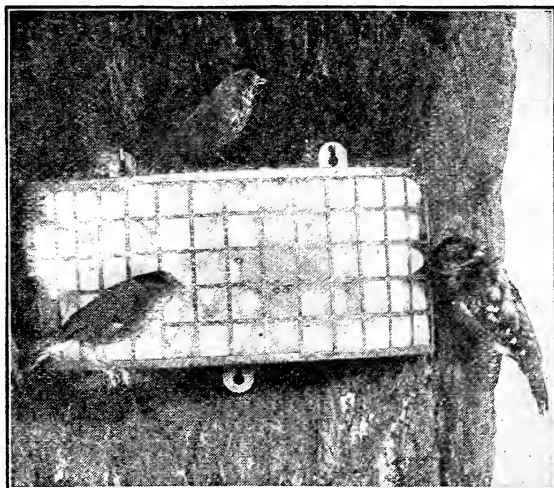
### PRICE LIST HUTS AND CABINS

Wren Hutlet, each...	\$1.50	Bluebird Hut, each...	\$1.75
Titmouse, each....	1.50	Bark Hut, each.....	3.00
Chickadee Hutlet, each.....	1.50		
Woodpecker and Flicker Hut, each.....	1.75		
Martin Houses.....	\$ 5.00 to \$50.00		
Feederies, Large.....	15.00 to 35.00		
Feederies, Small.....	1.50 to 2.00		
Carved and Hewn Hut.....	5.00 to 25.00		
Squirrel Cabins, each.....	4.00 to 10.00		

## The Dodson Improved Sparrow Trap

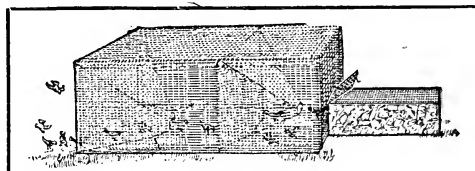
The Dodson Sparrow Trap is made of tinned wire, electrically welded, strong and durable—will last for years. It has sharp, adjustable needle points projecting from the mouth of each of the two funnels, which effectively prevent any sparrows from getting out of either the front or second enclosure. Size 36 x 18 x 12 inches.

Price, complete with receiving box..... \$8.00

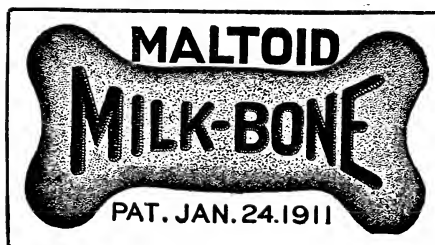


**W**INTER and Summer, you'll find a happy family of wild birds around you, provided you feed them. It's got a metal back, curved to fit a tree trunk or post that protects the tree from injury.

The stuffing of the basket portion is the work of an instant. Suet or beef trimmings is the best packing. In spring you can fill a part with hair, twine, feathers and cotton (nesting materials). Place the basket on the shady side in Summer, and the sunny side in Winter. Weight, 2 lbs. Price, each, \$1.00; postage extra.



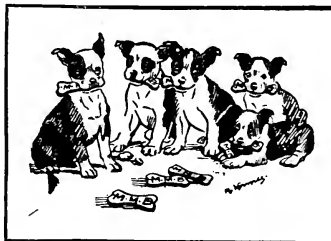
## MALTOID MILK-BONE



**D**OGS cannot and do not properly digest the same foods as human beings. Maltoide Milk-Bone is scientifically compounded and a perfectly balanced ration, composed of all the good things which a dog enjoys and can be fed exclusively, making happy and contented dogs and puppies.

Put up in sanitary and economical packages, insuring freshness.

Made in sizes for dogs and puppies. 20c pkg., mailing weight 1 lb.; 35c pkg., mailing weight, 3 lbs.; postage extra, see postal rates—2nd page of cover.



## SPRATT'S PATENT DOG AND PUPPY CAKES

**R**EQUIRE no preparation, no trouble, no cooking, and are adapted for all breeds of dogs. They are invaluable as a change of food during the warm weather, and are used by the leading kennel owners and breeders throughout the world. Kennel owners look upon these cakes as a necessity, especially during the summer months.

**SPRATT'S PATENT DOG CAKES.** 2 lbs., 30c; 25 lbs., \$3.30; 50 lbs., \$6.25; 100 lbs., \$11.75.

**SPRATT'S PATENT PUPPY CAKES.** 2 lbs., 30c; 25 lbs., \$3.40; 50 lbs., \$6.50; 100 lbs., \$12.25.



## CARBOLA The Disinfecting White Paint

Use It Instead of Whitewash and Disinfectants

The convenience with which Carbola is mixed and applied, the better results it gives, the saving of time and labor it effects, its low cost, the absence of disagreeable odor and the fact that it does not blister, flake or peel off, are a few of the many reasons why it has earned the endorsement of many U. S. Experiment Stations and best known and most carefully conducted poultry, dairy and breeding farms.

**PRICES:**—Trial package, 30 cents; (Paints and disinfects 200 square feet.) 10 pounds, (10 gallons), \$1.25; 50 pounds, (50 gallons), \$5.00.

# Poultry Feeds and Supplies

## SPECIAL NOTICE

Prices quoted represent market values at time of going to press only.

Market fluctuations prevent us quoting firm prices on Feeds in our Catalogues, but we are always prepared to quote firm prices upon receipt of an estimate of your wants. None of our Feeds contain grit.

Prices quoted include delivery to Express or Freight depots here, purchaser paying transportation charges. Postage must be added if wanted by mail.

**"GLOBE" CHICK MASH WITH BUTTERMILK.** 3 lbs., 30c; 25 lbs., \$2.05; 50 lbs., \$3.75; per bag of 100 lbs., \$6.75.

**"GLOBE" CHICK FEED.** 3 lbs., 25c; 25 lbs., \$1.80; 50 lbs., \$3.30; per bag of 100 lbs., \$5.85.

**"GLOBE" DEVELOPING FEED.** 3 lbs., 25c; 25 lbs., \$1.80; 50 lbs., \$3.25; per bag of 100 lbs., \$5.75.

**"GLOBE" SCRATCH FEED.** 3 lbs., 25c; 25 lbs., \$1.75; 50 lbs., \$3.15; per bag of 100 lbs., \$5.55.

**"GLOBE" EGG MASH.** 3 lbs., 25c; 25 lbs., \$1.80; 50 lbs., \$3.25; per bag of 100 lbs., \$5.75.

**PURINA CHICKEN CHOWDER.** 3 lbs., 25c; 25 lbs., \$1.80; 50 lbs., \$3.30; per bag of 100 lbs., \$5.85.

**SPRATT'S CHICK MEAL.** 2 lbs., 30c; 25 lbs., \$3.00; 50 lbs., \$5.65; per bag of 100 lbs., \$10.50.

**SPRATT'S POULTRY MEAL.** 2 lbs., 30c; 25 lbs., \$3.00; 50 lbs., \$5.65; per bag of 100 lbs., \$10.50.

**SPRATT'S TURKEY MEAL, GAME MEAL AND PHEASANT MEAL.** 2 lbs., 30c; 25 lbs., \$3.00; 50 lbs., \$5.65; per bag of 100 lbs., \$10.50.

**PRATT'S BABY CHICK FOOD.** 3-lb. pkg., 30c; 6½-lb. pkg., 60c; 14-lb. bag, \$1.20.

**PINHEAD OATS.** 3 lbs., 30c; 25 lbs., \$2.40; 50 lbs., \$4.50; per bag of 100 lbs., \$8.25.

**HULLED OATS.** 3 lbs., 30c; 25 lbs., \$2.40; 50 lbs., \$4.50; per bag of 100 lbs., \$8.25.

**DIAMOND GLUTEN MEAL.** 4 lbs., 25c; 25 lbs., \$1.55; 50 lbs., \$2.80; per bag of 100 lbs., \$4.85.

**SUNFLOWER SEED.** Per lb., 15c; 25 lbs., \$3.50; 50 lbs., \$6.65; per bag of 100 lbs., \$12.50.

**ALFALFA MEAL.** 4 lbs., 25c; 25 lbs., \$1.30; 50 lbs., \$2.25; per bag of 100 lbs., \$3.75.

**MEAT SCRAPS.** 50% Protein. 3 lbs., 30c; 25 lbs., \$2.20; 50 lbs., \$4.05; per bag of 100 lbs., \$7.35.

**DIGESTER TANKAGE.** 60% Protein. 2 lbs., 30c; 25 lbs., \$2.25; 50 lbs., \$4.15; per bag of 100 lbs., \$7.55.

**BLOOD MEAL.** 80% Protein. 2 lbs., 30c; 25 lbs., \$3.15; 50 lbs., \$5.95; per bag of 100 lbs., \$11.10.

**GRANULATED BONE.** Furnished in three sizes; fine medium and coarse. 3 lbs., 25c; 25 lbs., \$1.80; 50 lbs., \$3.25; per bag of 100 lbs., \$5.75.

**CHARCOAL.** Furnished in three sizes; fine, medium and coarse. 4 lbs., 25c; 25 lbs., \$1.35; per bag of 50 lbs., \$2.10.

**CRUSHED OYSTER SHELLS.** Furnished in two sizes; fine and coarse. 6 lbs., 25c; 25 lbs., 75c; 50 lbs., \$1.20; per bag of 100 lbs., \$1.60.

**MICA CRYSTAL GRIT.** Furnished in three sizes; fine, medium and coarse. 6 lbs., 25c; 25 lbs., 75c; 50 lbs., \$1.15; per bag of 100 lbs., \$1.55.

No charge for bags on any of the above Feeds.

## Miscellaneous Feeds

**BARLEY, for feed.** 4 lbs., 25c; 25 lbs., \$1.45; 50 lbs., \$2.55; per bag of 100 lbs., \$4.60.

**BRAN.** 4 lbs., 25c; 25 lbs., \$1.35; 50 lbs., \$2.35; per bag of 100 lbs., \$4.15.

**BUCKWHEAT, for feed.** 3 lbs., 25c; 25 lbs., \$1.80; 50 lbs., \$3.30; per bag of 100 lbs., \$6.10.

**CORN MEAL.** 4 lbs., 25c; 25 lbs., \$1.45; 50 lbs., \$2.60; per bag of 100 lbs., \$4.65.

**CRACKED CORN.** 4 lbs., 25c; 25 lbs., \$1.45; 50 lbs., \$2.60; per bag of 100 lbs., \$4.65.

**CORN, SHEELED.** 4 lbs., 25c; 25 lbs., \$1.40; 50 lbs., \$2.45; per bag of 100 lbs., \$4.35.

**KAFIR-CORN.** White. 3 lbs., 25c; 25 lbs., \$1.55; 50 lbs., \$2.80; per bag of 100 lbs., \$5.10.

**MIDLINGS.** 3 lbs., 25c; 25 lbs., \$1.50; 50 lbs., \$2.65; per bag of 100 lbs., \$4.75.

**MILO MAIZE.** 4 lbs., 25c; 25 lbs., \$1.40; 50 lbs., \$2.45; per bag of 100 lbs., \$4.35.

No charge for bags on any of the above Feeds.

Prices on all Poultry Feeds and Supplies Subject to change Without Notice.

Write for Special Firm Prices on Lots of 5 Bags or Over.

## Pigeon Feeds

**"GLOBE" PIGEON FEED.** No corn—no grit. 3 lbs., 30c; 25 lbs., \$2.15; 50 lbs., \$4.00; per bag of 100 lbs., \$7.00.

**"KING" PIGEON FEED.** 3 lbs., 25c; 25 lbs., \$1.80; 50 lbs., \$3.25; per bag of 100 lbs., \$5.75.

**CANADA PIGEON PEAS.** 3 lbs., 30c; 25 lbs., \$2.20; 50 lbs., \$4.05; per bag of 100 lbs., \$7.30.

**HEMP SEED.** 2 lbs., 30c; 25 lbs., \$2.90; 50 lbs., \$5.50; per bag of 100 lbs., \$10.50.

**PIGEON MILLET.** 3 lbs., 25c; 25 lbs., \$1.55; 50 lbs., \$2.80; per bag of 100 lbs., \$5.10.

**McCULLOUGH'S HEALTH GRIT.** 6 lbs., 25c; 25 lbs., 80c; 50 lbs., \$1.25; per bag of 100 lbs., \$1.75.

**FOUST'S HEALTH GRIT.** 5 lbs., 25c; 25 lbs., 90c; 50 lbs., \$1.50; per bag of 100 lbs., \$2.25.

**ROCK SALT.** 8 lbs., 25c; per 100 lbs., \$1.50.

No charge for bags on any of the above Feeds.

**TOBACCO STEMS.** Per bale about 125 lbs., \$2.00.

## Pure Seeds for Birds

Canary Seed, re-cleaned..... Per lb., 20c

Rape Seed, re-cleaned..... Per lb., 25c

Hemp Seed, re-cleaned..... Per lb., 15c

Sunflower Seed, re-cleaned..... Per lb., 15c

Millet Seed, re-cleaned..... Per lb., 15c

Lettuce Seed, re-cleaned..... Per lb., 20c

Cuttle Bone..... 10c per oz., Per lb., 90c

Bird Gravel..... Package, 15c

## O. K. Poultry Litter

A DEODORIZER, ABSORBANT, DISINFECTANT,  
ECONOMICAL AND LABOR SAVING.

O. K. POULTRY LITTER is imported and is especially adapted as a litter in Scratching Pens and for catching droppings under perches. Many prominent European Poultry Raisers have used it for years and we have imported large quantities of it for several of the leading breeders in this country.

One bale will cover about 80 square feet 3 inches deep. Per bale, \$4.50; per bu., \$1.25.

## Mustard for Poultry

**FRENCH'S POULTRY MUSTARD.** 1½ lbs., 55c; 3 lbs., \$1.00; 5 lbs., \$1.65; 10 lbs., \$3.25; 25 lbs., \$7.80.

## Blatchford's Calf Meal

**BLATCHFORD'S CALF MEAL.** 25 lbs., \$2.00; 50 lbs., \$3.35; 100 lbs., \$6.65.

## Darling's Meat Crisps

**DARLING'S MEAT CRISPS.** 3 lbs., 50c; 6½ lbs., \$1.00; 25 lb. pall, \$3.50.

## Milkoline

This is a pure condensed Buttermilk Feed for Poultry and Hogs, and being modified will keep an indefinite length of time in any climate, will not mould, sour, or lose its acidity. Prices.—Per gal., \$2.00; 5 gals., \$7.50; 10 gals., \$12.50. No charge for kegs or barrels.

Send for descriptive booklet.

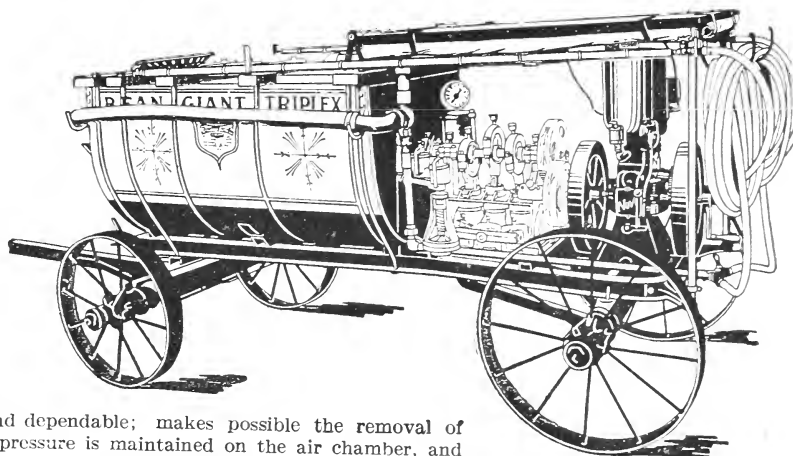
## Poultry Appliances

Lack of space prevents us describing the numerous Appliances we handle, but will quote interesting prices on—Prairie State Incubators and Brooders; Buckeye Incubators and Brooders; Newtown Giant Coal and Oil Burning Brooders; Red Chief Grinding Mills; Mann's Green Bone Cutters; Oat Sprouters; Fountains; Feeding Devices, etc.

"United States Food Administration  
License Number G-18737."

# Bean Power Spraying Outfits

THE accompanying illustration presents a view of the Bean Power Sprayer. These sprayers are made in several sizes to meet all the requirements of orchardists, whether orchards are large or small. They have proved to be economical, labor-saving and more thorough in applying insecticide than any other device on the market.



"WHY the

**BEAN**

is the **BEST"**

**FIRST**—The Bean Pressure Regulator maintains a uniform pressure; saves

fuel and wear of engine; is safe and dependable; makes possible the removal of any valve in the pump while full pressure is maintained on the air chamber, and while engine is operating.

**SECOND**—The Bean Threadless Ball Valves (Reversible and Interchangeable Seats) may be removed without stopping engine; no threads; saves time; valves easily cleaned.

**THIRD**—Porcelain lined Cylinders, guaranteed to last the life of the pump.

**FOURTH**—Underneath suction; tanks easily emptied; engine throws more liquid with less power.

**FIFTH**—Only pump without stuffing box—This saves labor and trouble.

**SIXTH**—Bean Eccentrics increase the life of the pump and the durability of the outfit.

**SEVENTH**—One piece steel bedplate—makes outfit rigid, durable and light.

**EIGHTH**—The Bean rocking bolster; special truck reduces weight of outfit; adjustable on all kinds of ground.

**NINTH**—Novo Engine; simple to operate; runs under all conditions; may be removed from outfit and used for other purposes.

**TENTH**—Bean refiller; saves time and labor; simple to operate; one man can fill the spray tank in 5 minutes. Besides these features the Bean equipment has many other strong points which the fruit growers should consider before purchasing an outfit.

Descriptive catalogue giving detailed information, mailed upon request.

**Nu-Rex Form Arsenate of Lead. Rex Bordeaux Mixture. Rex Lime and Sulphur.**  
Send for descriptive circulars giving full information.

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# McCULLOUGH'S Catalogue -of- Bulbs and Seeds

FALL 1920



TRADE MARK



Established 1838  
Incorporated 1904

## THE J. M. McCULLOUGH'S SONS CO.

H. B. McCULLOUGH, Pres't

GEO. H. PARVIN, Vice-Pres't

Seedsman and Importers of **BULBS**

Salesrooms and Offices:  
**316 WALNUT STREET 316**  
Just Below Fourth

P. O. BOX  
845

**GINGINNATI, OHIO**

TRADE MARK



Established 1838  
Incorporated 1904